

## 19261

Val Leu Ile Gly Gln Gly Arg Gly Leu Leu Trp Lys Thr Phe Tyr Leu  
 370 375 380

Val Asp Ala  
 385

<210> 42840

<211> 314

<212> PRT

<213> A.fumigatus

<400> 42840

Thr Phe Leu Tyr Val Met Ser Leu Glu Thr Gly Ala Ser Leu Ile Thr  
 1 5 10 15  
 Leu Ser Leu Leu Leu Asn Lys Ile Ser Gly Leu Tyr Gly Leu Leu Ala  
 20 25 30  
 Leu Leu Thr Gly Tyr His Leu Ser Pro Val Gln Leu Ser Met Tyr Leu  
 35 40 45  
 Tyr Ser Leu Ile Ala Leu Gly Leu Thr Ala Tyr Leu Phe Pro His Ile  
 50 55 60  
 Arg Lys Gln Ser Pro Leu Gln Cys Leu Ala Leu Ala Trp Leu Tyr Leu  
 65 70 75 80  
 Leu Asp Thr Val Ile Asn Ala Ala Tyr Thr Ala Ala Phe Gly Val Thr  
 85 90 95  
 Trp Phe Leu Val Ile Ser Gln His Tyr Asp Asn Gly Thr Ala Lys Gly  
 100 105 110  
 Pro Gly Ser Asp Thr Ile Ser Gln Thr Ala Gly Phe Thr Asn Pro Lys  
 115 120 125  
 Tyr Ser Ser Ser Ser Thr Asn Ala Asn Ser Ala Arg Ser Pro Asp Gly  
 130 135 140  
 Leu Thr Asn Ala Val Thr Gln Pro Glu Ser Phe Gln Ser Ile Val Phe  
 145 150 155 160  
 Ile Cys Leu Leu Trp Ile Ile Arg Ile Tyr Phe Val Phe Val Met Leu  
 165 170 175  
 Ala Phe Ala Arg Gln Lys Leu Arg Leu Tyr Val Ala Ile Pro Arg His  
 180 185 190  
 Thr Gln Leu Pro Thr His Ser Arg Asn Thr Ser Ile Ala Ser Val Ala  
 195 200 205  
 Ser Val Ala Asp Ile Asp Arg Glu Pro Phe Ser Pro Tyr Ser Pro Asp  
 210 215 220  
 Gly Gln Gly Trp Gln Gly Arg Leu Gly Arg Leu Met Ile Gly Leu Gly  
 225 230 235 240  
 Arg Ser Tyr Trp Leu Gly Glu Asp Glu Asp Gly Ala Trp Leu Asp Ser  
 245 250 255  
 Leu Gly Arg Lys Phe Arg Ala Arg Gly Gln Glu Leu Pro Gly Pro Leu  
 260 265 270  
 Glu Arg Glu Arg Arg Arg Arg Ser Gly Thr Gly Pro Pro Gln Pro Ser  
 275 280 285  
 Gln Ala Thr Val Gln Ala Ala Ala Leu Gln Gln Pro Ile Pro Glu Asn  
 290 295 300  
 Leu Lys Met His Asp Trp Thr Asp Gly Arg  
 305 310

<210> 42841

<211> 90

<212> PRT

<213> A.fumigatus

&lt;400&gt; 42841

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Ser His Ser Pro Val His Ala Ile Val Met Phe Gln Leu Glu His Ser
1          5          10          15
Pro Cys Asp Gln Ser Leu Ile Phe Gln Thr Ala Ala Arg Val Ala Tyr
          20          25          30
Leu Val Ser Asp Thr Ile Leu Ser Val Gln Pro Ser Leu Gln Thr Asp
          35          40          45
Ser Leu Phe Ser Lys Pro Leu Lys Ala Leu Lys Ala Ser Asn Ala Arg
          50          55          60
Ser Ile Leu Pro Arg Ser Ala Pro Glu Val Ser Glu Leu Ala Thr Tyr
65          70          75          80
Pro Ile Ala Lys Ile Ser Gln Asn Leu Asp
          85          90

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&lt;210&gt; 42842

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42842

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His Cys Arg Gln Val Val Ala Val Arg Ser Asn Glu Asp Pro Leu Leu
1          5          10          15
Ser Ala Phe His Pro Leu Gln Ala Gly Asp Ala Val Ser Val Val Thr
          20          25          30
Gly Ser Ser Val Leu Leu Ser Ser Val Pro Arg Leu Tyr Arg Leu Ala
          35          40          45
Asn Ser Pro Ile Val Ile His Val Ala Leu Glu Pro Ser Pro Phe Pro
          50          55          60
Asp Phe Ser Val Ile Ser Ser Ile Arg Gln Cys Gly Phe Thr Phe Leu
65          70          75          80
His Ser Glu Thr Ile Gln Glu Ala Gln Asp Ile Ala Ile Thr Ala His
          85          90          95
Ala Leu Ala His Arg Ser Gly Lys Gly Val Ile His Phe Phe Asp Pro
          100          105          110
Ala Asn Ser Ala Asn Glu Asp Ala Ile Glu Ala Glu Asn Val Asp Val
          115          120          125
Ile Lys Ser Leu Leu Asn Leu Gly Arg Ser Thr Glu Ser Gln Ser Gly
          130          135          140
Ala Gln Thr Leu Tyr Ala Asp Ser Gly Arg Val Ala Thr Val Ser Asp
145          150          155          160
Glu Ile Ala Glu Ser Ser Ala Ala Gln Gly Gly Ile Ala Ser Thr Leu
          165          170          175
Ala Pro Pro Ala Gln Thr Pro Ser Ser Val Ser Val Asp Asn Ser Ser
          180          185          190
Val Gly Ser Ser Arg Arg Asp Ser Ser Thr Asp Ser His Ala Thr Ser
          195          200          205
Ser Ala Ala Thr Thr Val Asp Ala Ala Thr Ser Val Arg Pro Val Ser
          210          215          220
Ala Ala Asp Ile Phe Glu Trp Thr Ala Gln Ile Trp Arg Ile Leu Ser
225          230          235          240
Gln Ser Thr Gly Arg Thr Tyr Arg Ala Ile Glu Tyr Thr Gly Pro Ser
          245          250          255
Asp Ala Lys Ser Ala Ile Phe Ile Phe Gly Ser Thr Gly Val Phe Val
          260          265          270
Asp Val Leu Ala Lys Ala Glu Ala Asn Ser Glu Leu Glu Asn Ile Gly

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275                      280                      285  
 Leu Ile Thr Ala Arg Leu Tyr Arg Pro Trp Val Gly Gly Gln Ile Val  
 290                      295                      300  
 Asn Ser Ile Pro Ser Ser Val Glu Lys Ile Ala Val Leu Glu Gln Val  
 305                      310                      315                      320  
 Arg Lys Thr Thr Lys Trp Gly Pro Ser Phe Met Asp Leu Leu Ser Ser  
 325                      330                      335  
 Leu Thr Pro Pro Ala Gly Arg Pro Thr Pro Gln Ile Val Gly Tyr Arg  
 340                      345                      350  
 Leu Gly Tyr Val Glu Pro Ser Thr Ala Val Gln Ala Leu Arg Gly Ile  
 355                      360                      365  
 Val Gln Asn Leu Asn Ser Ser Ser Pro Ile Gln Asn Leu Glu Ile Gly  
 370                      375                      380  
 Ser Ala Lys Ala Pro Ala Thr Glu His Ser Leu Glu Gln Pro His Val  
 385                      390                      395                      400  
 Glu Asn Ala Tyr Leu Lys Ile Leu Asn Gln Leu Phe Ala Glu Arg Leu  
 405                      410                      415  
 Tyr Ile Ala Asn Gln Leu Gly Ser Gln Asn Ala Gly Ile Ser Ser Thr  
 420                      425                      430  
 Ile Ala Ala Ser Pro Glu Tyr Gly Phe Gly Ser Leu Ile Ala Arg Lys  
 435                      440                      445  
 Glu Arg Arg Gln Arg Phe Val Arg Glu Val Glu Glu Ala Ser Lys Ser  
 450                      455                      460  
 Thr Asp Phe Thr Ser Asp Ser Arg Ser Ser Leu Ser Asn Trp Ala Leu  
 465                      470                      475                      480  
 Asn Val Lys Asp Ala Ser Lys Ala Asn Lys Leu Ala Ser Glu Val Ile  
 485                      490                      495  
 Glu Thr Leu Ser Lys Asp Glu Phe Gln Leu Val Arg Gly Ser Leu Ser  
 500                      505                      510  
 Arg Arg Ser Ser Ser  
 515

&lt;210&gt; 42843

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42843

His Gly Ser Ser Leu Ser His Ser Thr Thr Ile Thr Gly Pro Gln Arg  
 1                      5                      10                      15  
 Asp Arg Ala Ala Thr Gln Ser Pro Lys Pro Pro Ala Ser Pro Thr Pro  
 20                      25                      30  
 Asn Thr Ala Pro Arg Pro Pro Met Gln Thr Pro His Glu Ala Arg Met  
 35                      40                      45  
 Ala Ser Arg Met Pro Ser Pro Ser Pro Arg Val Ser Lys Ala Leu Cys  
 50                      55                      60  
 Ser Ser Ala Cys Cys Gly Leu Ser Ala Phe Thr Ser Cys Ser Ser Cys  
 65                      70                      75                      80  
 Ser Pro Leu Pro Ala Arg Asn Tyr Val Ser Thr Ser Gln Ser His Ala  
 85                      90                      95  
 Thr His Ser Ser Pro Arg Thr Ala Ala Ile Pro Pro Ser Leu Ala Leu  
 100                      105                      110  
 Leu Val Leu Leu Ile Ser Thr Gly Ser Arg Ser Arg His Ile Ala Leu  
 115                      120                      125  
 Met Ala Lys Ala Gly Arg Ala Gly Leu Ala Val Leu  
 130                      135                      140

<210> 42844  
 <211> 148  
 <212> PRT  
 <213> A.fumigatus

<400> 42844  
 Pro Pro Cys Leu Thr Arg Leu Arg Arg Ala Pro Leu Pro Lys Val Ala  
 1 5 10 15  
 Leu Leu Pro Pro Leu Arg Arg Gln Pro Arg Leu Leu Gln Ala Ser Val  
 20 25 30  
 Leu Ile Thr His Pro Ser Asp Arg His Gly Glu Ile Ala Ala Arg Thr  
 35 40 45  
 Ala Met Pro Pro Ala Leu Gln Pro Gln Pro Leu Met Leu Gln Leu Arg  
 50 55 60  
 Ser Val Arg Ser Ala Leu Pro Thr Ser Ser Ser Gly Pro Pro Arg Ser  
 65 70 75 80  
 Gly Gly Phe Cys Pro Arg Ala Leu Asp Ala Pro Thr Ala Arg Leu Asn  
 85 90 95  
 Thr Leu Val Pro Arg Met Pro Ser Arg Pro Phe Ser Ser Leu Ala Pro  
 100 105 110  
 Pro Glu Tyr Ser Leu Met Phe Ser Gln Arg Arg Lys Pro Thr Val Ser  
 115 120 125  
 Ser Arg Thr Ser Asp Ser Ser Pro Leu Val Phe Thr Val Leu Gly Ser  
 130 135 140  
 Glu Ala Arg Leu  
 145

<210> 42845  
 <211> 960  
 <212> PRT  
 <213> A.fumigatus

<400> 42845  
 Val Glu Glu Ala Leu Leu Glu Glu Ser Gln Trp Leu Ile Gly Ser Asp  
 1 5 10 15  
 Ala Trp Ala Tyr Asp Leu Gly Asn Ser Gly Val His His Val Leu Ala  
 20 25 30  
 Ser Gly Glu Asn Val Asn Met Leu Ile Ile Asp Ser Gln Pro Tyr Ser  
 35 40 45  
 Glu Arg Ala Ala Ala Asp Pro Thr Arg Arg Lys Lys Asp Ile Gly Leu  
 50 55 60  
 Tyr Ala Met Asn Phe Gly Asn Ala Tyr Val Ala Ser Val Ala Val Tyr  
 65 70 75 80  
 Gly Ser Tyr Thr Gln Val Leu Gln Ala Met Ala Glu Ala Glu Gln Phe  
 85 90 95  
 Lys Gly Pro Ser Val Val Val Ala Tyr Leu Pro Tyr Asn Gln Glu Asn  
 100 105 110  
 Asp Ser Ala Leu Thr Val Leu Gln Glu Thr Lys Lys Ala Ile Asp Leu  
 115 120 125  
 Gly Tyr Trp Pro Leu Tyr Arg Trp Asn Pro Glu Asn Glu Thr Lys Gly  
 130 135 140  
 Glu Pro Lys Phe Ala Leu Asp Ser Asp Arg Leu Arg Arg Glu Leu Glu  
 145 150 155 160  
 Glu Phe Leu Arg Arg Asp Asn Gln Leu Thr Gln Leu Met Asn Arg Lys  
 165 170 175



Pro Lys Phe Ser Ala Val Leu Ser Glu Ser Tyr Gly Thr Glu Val Arg  
 180 185 190  
 Ala Leu Gln Lys Arg Lys Ala Lys Asp Ser Tyr Glu Gln Leu Leu Glu  
 195 200 205  
 Gly Leu Phe Gly Ala Pro Leu Thr Ile Leu Phe Ala Ser Asp Gly Gly  
 210 215 220  
 Asn Ala Gln Thr Leu Ala Lys Arg Leu Gly Asn Arg Gly Arg Ala Arg  
 225 230 235 240  
 Gly Leu Lys Thr Met Val Ile Ala Met Asp Asp Tyr Pro Ala Glu Asp  
 245 250 255  
 Leu Ala Thr Glu Glu Asn Val Val Phe Ile Thr Ser Thr Ala Gly Gln  
 260 265 270  
 Gly Glu Phe Pro Gln Asn Gly Arg Ser Leu Trp Glu Val Ile Lys Asn  
 275 280 285  
 Ser Gly Asp Leu Asp Leu Ser Thr Ile Lys Tyr Ser Val Phe Gly Leu  
 290 295 300  
 Gly Asp Ser His Tyr Trp Pro Arg Lys Glu Asp Lys Ile Tyr Tyr Asn  
 305 310 315 320  
 Lys Pro Ala Lys Asp Leu Asp Ala Arg Ile Ala Phe Leu Gly Gly Arg  
 325 330 335  
 Lys Leu Thr Asp Ile Gly Leu Gly Asp Asp Gln Asp Pro Asp Ala Tyr  
 340 345 350  
 Gln Thr Gly Tyr Ser Glu Trp Glu Pro Arg Leu Trp Gln Ala Leu Gly  
 355 360 365  
 Val Asp Lys Val Glu Gly Leu Pro Glu Glu Pro Ala Pro Leu Thr Asn  
 370 375 380  
 Glu Asp Ile Lys Ile Gln Ser Asn Tyr Leu Arg Gly Thr Ile Ala Glu  
 385 390 395 400  
 Gly Leu Leu Asp Glu Thr Thr Gly Ala Ile Ser Ala Ser Asp Gln Gln  
 405 410 415  
 Leu Thr Lys Phe His Gly Thr Tyr Met Gln Asp Asp Arg Asp Val Arg  
 420 425 430  
 Asp Glu Arg Lys Ala Gln Gly Leu Glu Pro Ala Tyr Ser Phe Met Ile  
 435 440 445  
 Arg Cys Arg Leu Pro Gly Gly Val Ala Thr Pro Leu Gln Trp Ile Gln  
 450 455 460  
 Met Asp Glu Ile Ser Ser Ala Tyr Gly Asn Glu Thr Met Lys Leu Thr  
 465 470 475 480  
 Thr Arg Gln Thr Phe Gln Phe His Gly Val Ile Lys Arg Asn Leu Arg  
 485 490 495  
 Ser Ala Met Arg Ala Ile Asn Lys Ala Leu Met Thr Thr Ile Ala Ala  
 500 505 510  
 Cys Gly Asp Val Asn Arg Asn Val Met Cys Ser Ser Leu Pro Glu Leu  
 515 520 525  
 Ser Tyr Phe His Arg Glu Thr His Ala Val Ala Lys Lys Ile Ser Asp  
 530 535 540  
 His Leu Leu Pro Ala Thr Thr Ala Tyr His Glu Ile Trp Leu Lys Asp  
 545 550 555 560  
 Asp Asp Asp Asn Lys Val Gln Val Ala Gly Asp Ala Val Gln Asp His  
 565 570 575  
 Glu Pro Leu Tyr Gly Pro Thr Tyr Leu Pro Arg Lys Phe Lys Ile Thr  
 580 585 590  
 Ile Ala Ile Pro Pro His Asn Asp Thr Asp Val Tyr Ala His Asp Ile  
 595 600 605  
 Gly Leu Ile Ala Ile Lys Gly Ala Asp Gly His Leu Glu Gly Phe Asn  
 610 615 620

Val Leu Ala Gly Gly Gly Met Gly Thr Thr His Asn Asn Lys Lys Thr  
 625 630 635 640  
 Tyr Pro Gln Thr Gly Arg Met Phe Gly Tyr Val Pro Ala Asp Gln Ala  
 645 650 655  
 His Ile Val Cys Glu Lys Ile Met Leu Val Gln Arg Asp Phe Gly Asp  
 660 665 670  
 Arg Lys Asn Arg Lys His Ala Arg Leu Lys Tyr Thr Ile Asp Asp Met  
 675 680 685  
 Gly Val Glu Thr Phe Lys Gly Lys Val Glu Ala Leu Leu Pro Asp Gly  
 690 695 700  
 Leu Arg Phe Ala Glu Pro Arg Pro Phe Lys Phe Thr Ser Asn Val Asp  
 705 710 715 720  
 Thr Phe Gly Trp Gln Lys Asp Glu Lys Gly Leu Asn His Phe Thr Phe  
 725 730 735  
 Phe Ile Glu Asn Gly Arg Val Glu Asp Thr Ala Glu Phe Thr Met Arg  
 740 745 750  
 Ser Gly Leu Arg Glu Leu Ala Lys Leu Asp Lys Gly Glu Phe Arg Leu  
 755 760 765  
 Thr Gly Asn Gln His Leu Val Phe Thr Asn Ile Lys Asp Glu Asp Leu  
 770 775 780  
 Pro Ala Val Lys Glu Ile Met Ala Lys His Lys Leu Asp Asn Thr Ser  
 785 790 795 800  
 Phe Ser Gly Leu Arg Leu Ser Ser Ser Ala Cys Val Ala Phe Pro Thr  
 805 810 815  
 Cys Gly Leu Ala Met Ala Glu Ser Glu Arg Tyr Leu Pro Val Leu Ile  
 820 825 830  
 Ser Lys Leu Glu Ser Thr Leu Glu Glu Val Gly Leu Ala Arg Asp Ser  
 835 840 845  
 Ile Val Met Arg Met Thr Gly Cys Pro Asn Gly Cys Ala Arg Pro Trp  
 850 855 860  
 Leu Ala Glu Val Ala Phe Val Gly Lys Ala Tyr Gly Ala Tyr Asn Met  
 865 870 875 880  
 Tyr Leu Gly Gly Gly Tyr His Gly Gln Arg Leu Asn Lys Leu Tyr Arg  
 885 890 895  
 Gln Ser Ile Lys Glu Asp Glu Ile Leu Glu Ile Met Lys Gly Leu Leu  
 900 905 910  
 Lys Arg Tyr Ala Leu Glu Arg Asn Thr Asp Gly Glu Thr Pro Glu Arg  
 915 920 925  
 Phe Gly Asp Trp Cys Ile Arg Ala Gly Ile Ile Asn Lys Thr Thr Asp  
 930 935 940  
 Gly Thr Asn Phe His Glu Gly Val Cys Trp Pro Ile Asn His Ser Ser  
 945 950 955 960

&lt;210&gt; 42846

&lt;211&gt; 297

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42846

Arg Cys Ser Cys Ile Met Leu Ser Arg Val Ala Arg Gln Lys Thr Ala  
 1 5 10 15  
 Ile Ser Leu Leu Arg Gln Ser Asn Gly Arg Arg Leu Gln Pro Ser Val  
 20 25 30  
 Ala Gly Leu Arg Phe His Gly Asn Ala Ser Lys Pro Ser Leu Leu Ala  
 35 40 45  
 Ser Ala Ser Val Thr Thr Pro Gln Glu Gln Thr His Arg Pro Ser Phe

|   |     |     |     |     |
|---|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |
| Gln Ser Asn Arg Thr Leu Ala Thr Ala Ala Asp Gln Ser Ala Val Asp |     |     |     |     |
| 65  |     | 70  |     | 80  |
| Gln Gly Ser Tyr Ala Ser Phe Asp Asp Ser His Tyr Ala Pro Glu Asn |     |     |     |     |
|   | 85  |     | 90  | 95  |
| Phe Tyr Asp Pro Ser Gln Gln Trp Ser Lys Leu Phe Pro Ser Leu Pro |     |     |     |     |
|   | 100 |     | 105 | 110 |
| Ala Lys Glu Leu Asp Pro Ser Ser Leu Ile Ile Val Gly Glu Ser Leu |     |     |     |     |
|   | 115 |     | 120 | 125 |
| Gln Thr Lys Pro Lys Val Ser Arg Lys Val Arg Gly Ile Gly Gly Asp |     |     |     |     |
|   | 130 |     | 135 | 140 |
| Glu Asp Glu Met Leu Ala Asn Leu Asp Val Ser Leu Lys Val Gly Arg |     |     |     |     |
| 145   |     | 150 |     | 155 |
| Phe Asp Arg Ala Ala Thr Leu Ile Asn Arg Leu Gly Gln His Tyr Pro |     |     |     |     |
|   | 165 |     | 170 | 175 |
| Val Gly Ser Ser Glu Tyr Leu Ala Ile His Asn Arg Tyr Leu Glu Lys |     |     |     |     |
|   | 180 |     | 185 | 190 |
| Met Val Ser His Met Ile Val Thr Arg Gln His Asn Met Val Leu Pro |     |     |     |     |
|   | 195 |     | 200 | 205 |
| Met Gln Arg Trp Phe Glu Leu Asp Met Pro Asn Gly Gly Val Lys Ala |     |     |     |     |
|   | 210 |     | 215 | 220 |
| Asp Ala Thr Thr Tyr Ala Ile Met Ile Arg Met Ala Leu Arg Met Leu |     |     |     |     |
| 225   |     | 230 |     | 235 |
| His Gly Ser Lys Arg Asp Arg Ala Val Arg Arg Tyr Trp Gln Phe Ala |     |     |     |     |
|   | 245 |     | 250 | 255 |
| Lys Lys Asp Asn Ile Glu Glu Glu Val Leu Ala Val Pro Val Leu Ser |     |     |     |     |
|   | 260 |     | 265 | 270 |
| Glu Leu Glu Leu Gly Glu Leu Ser Glu Val Arg Ser Leu His Leu Ile |     |     |     |     |
|   | 275 |     | 280 | 285 |
| Thr Met Leu Pro Phe Ser Phe Ser Tyr                             |     |     |     |     |
| 290   |     | 295 |     |     |

&lt;210&gt; 42847

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42847

|   |     |    |     |
|---|-----|----|-----|
| Ile Cys Ser Ser Asp Leu Gln Arg Val Ala Ile Gly Ser Ile Gly Ser |     |    |     |
| 1   | 5   | 10 | 15  |
| Glu Pro Ala Pro Ala Val Ala Val Ser Ser Gln Thr Asp Asn Leu Ala |     |    |     |
|   | 20  | 25 | 30  |
| Glu Val Arg Pro Val Glu Gln Lys Gly Leu Gly Leu Ser Ser Leu Lys |     |    |     |
|   | 35  | 40 | 45  |
| Gln Ser Leu Ser Leu Phe Leu Ser Glu Ser Ser Pro Ser Val Pro Ala |     |    |     |
|   | 50  | 55 | 60  |
| Asp Pro Glu Gln Lys Leu Ala Phe Asp Glu Leu Lys Gln Arg Gln Leu |     |    |     |
| 65  |     | 70 | 75  |
| Glu Ala Asp Ser Ile Arg Ser Ala Met Asn Arg Trp Arg Gln Glu Phe |     |    |     |
|   | 85  |    | 90  |
| Asp Asn Arg Gln Lys Leu Gly Leu Asp Ala Thr Ala Gly Gly Lys Lys |     |    |     |
|   | 100 |    | 105 |
| Leu Gly Ala Ile Met Thr Glu Trp His Ser Ser Leu Val Ala Arg Ile |     |    |     |
|   | 115 |    | 120 |
| Lys Glu Glu Leu Glu Leu Val Ala Glu Ala Glu Ala Asn Pro Ile Arg |     |    |     |
|   | 130 |    | 140 |

## 19268

Thr Leu Glu Gln Lys Glu Arg Cys Glu Tyr Gly Val Tyr Leu Arg Cys  
 145 150 155 160  
 Leu Asp Thr Asp Thr Leu Ala Ala Leu Thr Ile Leu Ala Val Met Ser  
 165 170 175  
 Thr Phe Ser Arg Gly Gly Met Glu Lys Gly Leu Lys Val Ser Ala Val  
 180 185 190  
 Val Ser Thr Ile Gly Lys Asp Leu Gln Asp Glu Leu Ile Ala Glu Ala  
 195 200 205  
 Ala Leu Lys Asn Glu Ala Gly Thr Asp Ser Arg Arg Leu Lys Ala Leu  
 210 215 220  
 Lys Glu Leu Leu Ala Gly Arg Lys Lys Lys Gly Gly Arg Ala Lys Trp  
 225 230 235 240  
 His Ala Leu Val Gln Lys Met Gln Lys Glu Asp Ala Thr Ile Met Trp  
 245 250 255  
 Ser Pro Arg Glu Thr Ala Lys Ile Gly Ala Val Leu Met Ser Leu Leu  
 260 265 270  
 Phe Glu Val Gly Lys Ala Pro Val Thr Met Glu Asp Pro Glu Thr Lys  
 275 280 285  
 Lys Lys Thr Val Thr Met Gln Pro Ala Phe Gln His Ala Tyr Gln Ile  
 290 295 300  
 Thr Phe Val His Trp Gln  
 305 310

&lt;210&gt; 42848

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42848

Leu Gly His Pro Val Val Asp Pro Phe Glu Asn Ser Ser Arg Gln Ile  
 1 5 10 15  
 Ser Pro Leu Met Asp Asp Ser Asp Pro Val Ile Ala Ser Tyr Asp Val  
 20 25 30  
 Tyr Leu Thr Asp Ser Glu Ile Ser Arg Phe Val Leu Gln Tyr Leu Asp  
 35 40 45  
 Arg Ser Ala Glu His Pro Tyr Asp Glu Arg His Glu Gln Lys Pro Thr  
 50 55 60  
 Ala Phe Arg Leu Lys Pro Asn Thr Gly Leu Val Glu Val Asp Val Pro  
 65 70 75 80  
 Ile Gln Thr Arg Val Asn Tyr Asp Val Ser Lys Gly Leu Arg Tyr Gly  
 85 90 95  
 Asp Ala Met Arg Arg Ser Arg Ser Ala Arg Asp Gly Gly Ser Tyr Gly  
 100 105 110  
 Leu Ala Gly Gly Phe Ser Ser Gly Ala Ala Ala Gly Gly Gly Lys Val  
 115 120 125  
 Lys Met Glu Gly Asn Val Asp Val Glu Met Ala Gly Met Asp Ser Lys  
 130 135 140  
 Glu Gly Ser Asp Ile Met Arg Val Gln Thr Leu Gly Gly Arg Ile Lys  
 145 150 155 160  
 Gly Pro Glu Asp Gly Asp Pro Val Tyr Met Leu Ala Ala Phe Arg Gly  
 165 170 175  
 Arg Gly

&lt;210&gt; 42849

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42849

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Leu Ala Phe Lys Gln Thr Glu Glu Ala Trp Gln Thr Tyr Glu Ser Tyr
1           5           10           15
Met Ile Gln Gln Asp Leu Glu Asn Val Pro Gln Leu Glu Ala Ala Ile
           20           25           30
Asp Ser Glu Asp Tyr Leu Asp Arg Met Ser Ala Pro Arg Ile Asp Pro
           35           40           45
Ala Arg Pro Glu Met Thr Gly Trp Ala Met Lys Gln Asn Arg Lys Arg
           50           55           60
Gln Lys Glu Gln Ala Ser Ile Asn Ala Gln Gly
65           70           75

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&lt;210&gt; 42850

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42850

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His Thr Cys Tyr Arg Ser Cys Glu Leu Gln His Thr Arg Ile Ile Thr
1           5           10           15
Leu Pro Ser Asn Leu Ser Leu Ser Arg Gly Glu Gly Thr Leu Ser Tyr
           20           25           30
Trp Ile Ile Gly Ser Ile Ile Tyr Gly Ile Tyr Phe Ile Thr Gly Cys
           35           40           45
Gln Ser Ser Ser Gln Val His Ser Gly Thr Asn Ala Tyr Trp Lys Val
           50           55           60
Glu Tyr Ala Val Pro Ile His
65           70

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&lt;210&gt; 42851

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42851

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Phe Thr Pro Cys Gln Arg Leu Cys Lys Thr Pro Thr Ser Ile Arg Tyr
1           5           10           15
Leu His Val Ile Lys Met Phe Ile Thr Thr Cys His Tyr Arg Lys Ala
           20           25           30
Lys Met Gln Lys Lys Leu His Arg Arg His Phe Val Ser Tyr Tyr Leu
           35           40           45
Ser Leu Phe Ser Glu Trp Lys Val Arg Asn Ala Val Ile Leu Arg Glu
           50           55           60
Leu Asp Val Tyr Ala Leu Asp
65           70

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&lt;210&gt; 42852

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42852

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Tyr Gly Asn Trp Thr Cys Gly Pro Asp Leu Glu Leu Leu Pro Met Ile

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## 19270

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1           5           10           15
Asp Ile Ala Asn Ile Ala Cys Gly Phe His Gly Gly Asp Pro Leu Ile
      20           25           30
Met Met Glu Thr Val Arg Asn Cys Lys Ala His Asn Val Arg Ile Gly
      35           40           45
Ala His Pro Gly Leu Pro Asp Leu Gln Gly Phe Gly Arg Arg Glu Met
      50           55           60
Lys Leu Ser Pro Glu Glu Leu Thr Ala Ile Thr Ile Tyr Gln Val Gly
65           70           75           80
Ala Leu Gln Gly Phe Leu Asp Arg Glu Gly Val Pro Leu His His Val
      85           90           95
Lys Pro His Gly Val Leu Tyr Gly Met Met Cys Arg Asp Tyr Glu Val
      100          105          110
Ala Lys Ala Val Met Leu Gly Ile Pro Lys Gly Val Pro Val Phe Gly
      115          120          125
Leu Ala Gly Thr Gln Met Glu Lys Ala Ala Asn Asp Leu Gly Ile Glu
      130          135          140
Phe Trp Ala Glu Leu Tyr Gly Asp Val Lys Tyr Asp Ser Asn Gly Met
145          150          155          160
Leu Val Ile Asp Arg Lys Lys Lys Pro Trp Asn Leu Ala Asp Val Glu
      165          170          175
Lys His Val Arg Gln Gln Ile Glu Glu Gln Ser Val Thr Ala Val Asp
      180          185          190
Gly Thr Val Val Gln Leu Pro Leu Lys Thr Tyr Pro Val Ser Ile Cys
      195          200          205
Cys His Ser Asp Ser Pro Gly Cys Val Asp Ile Ile Arg Thr Thr Arg
      210          215          220
Lys Val Ala Asp Glu Phe Asn Ala Lys His Gly Arg
225          230          235

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&lt;210&gt; 42853

&lt;211&gt; 567

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42853

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Ile Arg Pro Arg Leu Arg Ser Glu Ile Met Thr Ser Arg Thr Ser Leu
1           5           10           15
Leu Phe Ser Phe Pro Ser Val Leu Gln Arg Thr Ala Arg Pro Leu Asn
      20           25           30
Thr Glu Ile Ser Pro Leu Arg Val Pro Ser Ile Arg Gly Arg Trp Tyr
      35           40           45
Gly Ser Asp Arg Gly Ser Ser Gln Pro Lys Glu Arg Ser Ile Ala Ala
      50           55           60
Gln Asp Ala Glu Lys Ser Pro Asp Leu Ser His Leu Asn Pro Pro Pro
65           70           75           80
Asp Asp Tyr Ser Arg Phe Ile Phe Gln Asp Lys Cys Arg Ser Thr Ile
      85           90           95
Tyr Ala Gly Ser Gly Gly Asn Gly Cys Val Ser Phe Leu Arg Glu Lys
      100          105          110
Tyr Ile Glu Gly Pro Pro Asn Gly Gly Asp Gly Gly Ser Gly Gly
      115          120          125
Ser Ile Tyr Ile Gln Ala Val Glu Gly Ile Thr Ser Leu His Lys Leu
      130          135          140
Ala Arg Arg Gly Val Ile Lys Ala Gly Arg Gly Lys Asn Gly Gln Gly
145          150          155          160

```

## 19271

Lys Ser Lys Gly Gly Arg Arg Gly Glu Asp Val Leu Leu Gln Val Pro  
 165 170 175  
 Val Gly Thr Val Val Arg Glu Val Asp Arg Tyr Asp Pro Val Ala Glu  
 180 185 190  
 Glu Leu Lys Arg Arg Lys Thr Pro Ala Ala Asp Val Asp Glu Leu Asp  
 195 200 205  
 Glu Ile Gly Leu Pro Ser Val Arg His Asp Arg Trp Val Leu Tyr Pro  
 210 215 220  
 Gly Ser Asn Pro Ser Asp Phe Leu Thr Thr Val Phe Pro Lys Asn Pro  
 225 230 235 240  
 Pro Arg Arg Gln Asn Ile Ala Ala Met Glu Pro Lys Ala Pro Ile Tyr  
 245 250 255  
 Leu Asp Leu Ser Lys Pro Met Asp Lys Pro Ile Leu Leu Ala Ala Gly  
 260 265 270  
 Gly Val Gly Gly Leu Gly Asn Ala His Trp Val Ser Arg Ser Ile Thr  
 275 280 285  
 Arg Pro Lys Phe Ala Ser Arg Gly Glu Gly Gly Met Arg Leu Glu Leu  
 290 295 300  
 Glu Phe Glu Leu Lys Leu Leu Ala Asp Val Gly Leu Val Gly Lys Pro  
 305 310 315 320  
 Asn Ala Gly Lys Ser Thr Leu Leu Arg Ser Leu Thr Asn Ser Arg Thr  
 325 330 335  
 Arg Val Gly Asn Trp Ala Phe Thr Thr Leu Ser Pro Ser Ile Gly Thr  
 340 345 350  
 Val Ile Ile Asp Asp Tyr Lys Gly Arg Pro Leu Val Glu Ala Lys Gly  
 355 360 365  
 Lys Ala Met Arg Thr Asn Phe Thr Ile Ala Asp Ile Pro Gly Leu Ile  
 370 375 380  
 Glu Gly Ala His Leu Asp Arg Gly Leu Gly Leu Gly Phe Leu Arg His  
 385 390 395 400  
 Ile Glu Arg Ala Gly Ile Leu Ala Phe Val Val Asp Leu Ser Ala Gly  
 405 410 415  
 Asp Pro Val Gln Gly Leu Gln Asn Leu Trp His Glu Leu Ser Glu Tyr  
 420 425 430  
 Glu Arg Ile Arg Asn Thr Glu Ser Val Leu Lys Ser Glu Asp Glu Trp  
 435 440 445  
 Gln Pro Ile Gly Gly Leu Pro Glu Leu Ala Ser Gln Asn Pro Val Asp  
 450 455 460  
 His Leu Asp Ser Thr Arg Asp Ser Pro Thr Asn Ile Pro Asp Gly Thr  
 465 470 475 480  
 Lys Gly Gln Leu Pro Ser Leu Glu Leu Pro Pro Ile His Thr Lys Pro  
 485 490 495  
 Trp Phe Val Val Ala Thr Lys Ala Asp Leu Pro Glu Thr Gln Asp Arg  
 500 505 510  
 Phe Lys Thr Leu Arg Asp Tyr Val Ala Ala Val Gln Asn Gly Val Val  
 515 520 525  
 Asp His Pro Gly Gly Tyr Pro Asp Gly Trp Lys Glu Lys Val Cys Ala  
 530 535 540  
 Leu Pro Val Ser Ala Ile Arg Gly Glu Gly Val Ser Arg Ile Pro Lys  
 545 550 555 560  
 Leu Val Met Glu Leu Asp  
 565

&lt;210&gt; 42854

&lt;211&gt; 582

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42854

Leu His Asp Ser Leu Ile Leu Pro Cys Ala Lys Met Thr His Leu Pro  
 1 5 10 15  
 Ser Val Val Ala Asn Ala Leu Ala Ala Leu Thr Asn Pro Ala Pro Glu  
 20 25 30  
 Asp Ser Ile Leu Glu Cys Cys Asp Asn Asp Leu Ala Ala Leu Arg Glu  
 35 40 45  
 Leu Leu Leu Lys Asn Thr Asp Arg Ala Leu Glu Leu Ala Asp Ala Lys  
 50 55 60  
 Leu Arg Val Phe Pro Phe Lys Asp Val Lys Thr Cys Trp Arg Arg Leu  
 65 70 75 80  
 Tyr Thr Asp Ala Ser Ile Ala Lys Val Cys Leu Ala Ile Cys Arg Asn  
 85 90 95  
 Cys Gly Phe Ser Cys Asp Gly Ile Pro Ala Asp Asn Asn Pro Arg Ile  
 100 105 110  
 Ala Asp Gly Thr Glu His Ala Ser Thr Leu Asp Pro Thr Pro Arg Gln  
 115 120 125  
 Ala Glu Tyr Lys Leu Asp Pro Asp Ala Pro Trp Leu Leu Ser Ser Ile  
 130 135 140  
 His Ala Leu Asp Asn Ala Leu Ile Met Thr Gly Ala Pro Leu Arg Glu  
 145 150 155 160  
 Asn Leu Val Glu Ser Leu Phe Ser Ala Leu His Leu Ser Thr Gln Ala  
 165 170 175  
 Tyr Arg Glu Gly Lys Thr Asp Pro Arg Ser Thr His Asp Tyr Ala Ser  
 180 185 190  
 Asp Ser Glu Leu Gly Gly Gln Ala Phe Lys Arg Arg Lys Leu Ser Pro  
 195 200 205  
 Pro Leu Phe Pro Pro Asp Ala Val Pro Ala Thr Thr Leu Lys His Pro  
 210 215 220  
 Val Pro Arg Val Ser Ala Pro Ser Phe Asp Ala Ile Glu His His Ile  
 225 230 235 240  
 Gln His Val Arg Thr Pro Leu Val Ile Thr Asp Ala Val Asp His Trp  
 245 250 255  
 Pro Ala Leu Ser Thr Arg Pro Trp Ala Ser Arg Asp Tyr Trp Phe Asp  
 260 265 270  
 Arg Thr Leu Gly Gly Arg Arg Leu Val Pro Val Glu Val Gly Thr Ser  
 275 280 285  
 Tyr Thr Asp Glu Gly Trp Gly Gln Arg Ile Met Glu Phe Arg Asp Phe  
 290 295 300  
 Val Asp Lys Phe Leu Trp Arg Gly Glu Gly Lys Thr Ser Lys Thr Gly  
 305 310 315 320  
 Thr Gly Lys Glu Arg Glu Asp Asp Gly Asn Asp Thr Gly Gln Thr Gly  
 325 330 335  
 Tyr Met Ala Gln His Asp Leu Leu Ser Gln Ile Pro Ala Leu Arg Lys  
 340 345 350  
 Asp Ile Cys Ile Pro Asp Tyr Cys Phe Ile Glu Pro Pro Gly Pro Glu  
 355 360 365  
 Pro Glu Thr Pro Val Tyr Leu Lys Lys Gln Arg Glu Arg Glu Glu Lys  
 370 375 380  
 Leu Lys Ser Ser Asn Ala Ser Ser Gly Val Gly Glu Ser His Thr Lys  
 385 390 395 400  
 Ser His Glu Gln Gln Gln His Glu Asn Ala Ala Ser Asp Asp Glu Ser  
 405 410 415  
 Ser Val Leu Gly Val Pro Ser Asp Pro Ile Ile Asn Thr Trp Ile Gly



420 425 430  
 Pro Ala Trp Thr Ile Ser Pro Leu His His Asp Pro Tyr His Asn Ile  
 435 440 445  
 Leu Val Gln Val Val Gly Ala Lys Tyr Ile Arg Leu Tyr Ser Pro His  
 450 455 460  
 Thr Pro Ala Ser Arg Ile Tyr Pro Lys Gly Met Glu Ala Val Asn Ser  
 465 470 475 480  
 Leu Ser Gly Ser Asn Ala Ser Ala Gly Leu Ser Asp Ser Ala Gln Leu  
 485 490 495  
 Gln Gly Lys Gly Ser Glu Ala Arg Val Glu Lys Gln Thr Gln Leu Ile  
 500 505 510  
 Asp Met Ser Asn Thr Ser Gln Val Asp Leu Ala Ala Ile Glu Leu Ser  
 515 520 525  
 Pro Ala Glu Ser Glu Gln Trp Glu Glu Met Trp Pro Gly Phe Leu Glu  
 530 535 540  
 Ala Glu Tyr Val Glu Thr Val Leu Lys Asp Gly Glu Cys Leu Tyr Ile  
 545 550 555 560  
 Pro Val Gly Trp Trp His Tyr Val Arg Gly Val Lys Ala Gly Ile Ser  
 565 570 575  
 Val Ser Phe Trp Trp Glu  
 580

&lt;210&gt; 42855

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42855

Trp Val Val Gln Val Met Leu Lys Ala Thr Ala Gly Gly Gly Gly Met  
 1 5 10 15  
 Gly Leu Leu Thr Cys Asn Ser Asp Ala Glu Val Arg Lys Ser Phe Ala  
 20 25 30  
 Thr Val Lys Ser Arg Gly Glu Ala Leu Phe Lys Asn Ala Gly Val Phe  
 35 40 45  
 Ile Glu Arg Tyr Tyr Pro Ala Ser His His Ile Glu Val Gln Val Phe  
 50 55 60  
 Gly Asn Gly Asp Gly Lys Ala Ile Phe Ile Gly Glu Arg Glu Cys Ser  
 65 70 75 80  
 Ile Gln Arg Arg His Gln Lys Val Ile Glu Glu Cys Pro Ser Pro Phe  
 85 90 95  
 Val Ser Arg Lys Pro Gly Leu Arg Lys Ser Leu Gly Glu Ala Ala Val  
 100 105 110  
 Arg Leu Ala Glu Ser Ile Lys Tyr Gly Ser Ala Gly Thr Ile Glu Tyr  
 115 120 125  
 Leu Val Asp Asp Glu Thr Gly Ala Phe Phe Phe Leu Glu Met Asn Thr  
 130 135 140  
 Arg Leu Gln Val Glu His Gly Ile Thr Glu Leu Cys Tyr Gly Leu Asp  
 145 150 155 160  
 Leu Val Glu Leu Met Leu Asn Gln Ala Asp Ala Gln Leu Ser Gly Lys  
 165 170 175  
 Asn Gly Val Glu Ala Ser Phe Leu Glu Ala Leu Pro Val Glu Thr Pro  
 180 185 190  
 Ser Gly Ala Ala Ile Glu Ala Arg Val Tyr Ala Glu Asn Pro Thr Lys  
 195 200 205  
 Asp Phe Ala Pro Cys Pro Gly Thr Leu Gln Thr Val Glu Trp Lys Glu  
 210 215 220

## 19274

Ile Pro Gly Ser Arg Ile Asp Thr Trp Val Tyr Arg Gly Ile Lys Val  
 225 230 235 240  
 Ser Ala Asn Tyr Gly Met Ser His Glu Gln Asn Pro Leu Phe Gly Thr  
 245 250 255  
 Leu Ala Gly Leu Thr Val Thr Cys Arg Ser Pro Thr Arg Glu Gly His  
 260 265 270  
 Val Pro Leu Ala Arg  
 275

&lt;210&gt; 42856

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42856

Pro Arg Ser Pro Ser Pro Ser Pro Glu Lys Ser Thr Leu Thr Cys Ser  
 1 5 10 15  
 Phe Leu Asp Thr Asp Pro Glu Ile Ile Pro Ile Glu Ala Pro Leu Asn  
 20 25 30  
 Ala Asn Val Trp Lys Val Glu Val Lys Gln Gly Asp Lys Leu Asp Glu  
 35 40 45  
 Asn Gln Val Val Val Ile Leu Glu Ala Met Lys Leu Glu Ile Ala Val  
 50 55 60  
 Arg Val Glu Pro Ser Thr Ala Gly Ala Thr Val Glu Lys Ile Leu Ala  
 65 70 75 80  
 Pro Pro Gly Glu Pro Ile Glu Ala Gly Lys Pro Leu Leu Leu Val Arg  
 85 90 95  
 Lys Ile Lys Ser  
 100

&lt;210&gt; 42857

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42857

His Val Asp Pro Leu Leu Ala Lys Val Met Tyr His Ser Pro Asp Arg  
 1 5 10 15  
 Gln Gln Thr Ile Leu Gly Met Arg Glu Ile Leu Lys Gln Ser Arg Ile  
 20 25 30  
 Cys Gly Pro Pro Thr Asn Leu Asp Phe Leu Val Lys Ile Leu Glu Glu  
 35 40 45  
 Glu Ala Phe Val Val Gly Asn Thr Leu Thr Arg Phe Leu Asp Asn Phe  
 50 55 60  
 Gln Tyr Thr Pro Ser Ala Ile Asp Val Ile Ser Gly Gly Ala Tyr Thr  
 65 70 75 80  
 Leu Ile Glu Asp Trp Pro Gly Arg Pro Thr Ile Gly Arg Gly Phe Cys  
 85 90 95  
 His Ser Gly Pro Met Asp Pro Leu Ala Phe Arg Ile Ala Asn Ala Leu  
 100 105 110  
 Val Asn Asn Pro Val Gly Leu Glu Ala Leu Glu Ile Thr Leu Ser Gly  
 115 120 125  
 Pro Asp Leu Arg Phe Leu Arg Pro Ala Ile Ile Ser Leu Cys Gly Ala  
 130 135 140  
 Pro Ile Glu Ala Lys Leu Asp Gly Glu Pro Val Pro Met Trp Ser Arg  
 145 150 155 160

## 19275

Val Lys Val Ala Ala Gly Gln Arg Leu Thr Ile Gly Lys Thr Thr Gly  
 165 170 175  
 Asn Gly Cys Arg Ala Tyr Leu Ala Val Phe Gly Gly Phe Leu Asn Val  
 180 185 190  
 Pro Lys Trp Phe Gly Ser Lys Ser Thr Ser Pro Gly Val Gly Val Gly  
 195 200 205  
 Gly Tyr Gln Gly Arg Gln Ile Ser Ser Gly Asp Leu Leu Thr Ile Thr  
 210 215 220  
 Ser Glu Ile Pro Glu Val Asn Gly Asp Leu Arg Ile Pro Glu His Leu  
 225 230 235 240  
 Ile Pro Asp Tyr Pro Asn His Trp Glu Leu Leu Ala Met Pro Gly Pro  
 245 250 255  
 Tyr Asp Glu Gly Tyr Leu Thr Pro Glu Ser Ile Glu Met Leu Tyr Glu  
 260 265 270  
 Thr Gln Trp Lys Ile Ser His Asn Ala Ala Arg Gly Gly Ile Arg Leu  
 275 280 285  
 Leu Gly Pro Lys Pro Arg Trp Ala Arg Ser Asp Gly Gly Glu Gly Gly  
 290 295 300  
 Ala His Pro Ser Asn Leu Ile Glu Tyr Gly Tyr Ala Ile Gly Ser Ile  
 305 310 315 320  
 Asn Trp Thr Gly Asp Asp Pro Val Ile Phe Pro Gln Asp Ala Pro Asp  
 325 330 335  
 Phe Gly Gly Phe Val Ser Ser His Thr Ile Val Lys Ala Asp Leu Trp  
 340 345 350  
 Lys Leu Gly Gln Val Lys Ala Gly Asp Thr Leu Lys Phe Arg Ala Val  
 355 360 365  
 Ser Leu Ala Asp Ala Leu Glu Ala Arg Arg Asp Leu Glu Arg Phe Val  
 370 375 380  
 Asp Glu Leu Val His Cys Cys Lys Gln Gly His Gly Phe His Ser Val  
 385 390 395 400  
 Lys Val Leu Arg Gly Met Pro Pro Glu Gln Thr Ala Lys Thr Arg Gly  
 405 410 415  
 Lys Gly Val Val His Arg Ile Glu Glu Gln Gly Asn Gln Pro Leu Val  
 420 425 430  
 Ser Tyr Arg Gln Val Trp Cys Thr Cys Arg Trp Val Val Trp Ala Thr  
 435 440 445  
 Ser

&lt;210&gt; 42858

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42858

Glu Leu Val Pro Ala Asp Glu Asn Phe Ile Thr Asp Ser Leu Phe Ala  
 1 5 10 15  
 Ala Leu Met Leu Tyr Tyr Asp Gly Met Lys Val Ser Gln Gln Arg Leu  
 20 25 30  
 Ile Ser Tyr Leu Cys Asn Leu Glu Thr Gln Leu Gly Asp Leu Ser Gln  
 35 40 45  
 Ala Lys Met Pro Ser Arg Leu Phe Arg Leu Pro Leu Thr Phe Glu Ser  
 50 55 60  
 Gln Arg Gln Lys Asp Ala Ile Gln Arg Tyr Met Glu Thr Gln Arg Pro  
 65 70 75 80  
 Tyr Ala Ser Tyr Leu Pro Asp Asn Met Glu Phe Val Ala Lys Asn Asn

[illegible]

```
<210> 42859
<211> 155
<212> PRT
<213> A.fumigatus
```

```
<210> 42860
<211> 61
<212> PRT
<213> A.fumigatus
```

```
<210> 42861
<211> 161
<212> PRT
<213> A.fumigatus
```

&lt;400&gt; 42861

```

Ser Asp Pro Gly Ala Ser Ser Asp Gln Ile Ile Gln Ile Ala Lys Gln
1          5          10          15
Asn Asn Ala Asn Ala Ile Ile Pro Gly Tyr Gly Phe Leu Ser Glu Asn
          20          25          30
Ala Asp Phe Ala Arg Ala Val Ala Ala Ala Gly Leu Val Phe Val Gly
          35          40          45
Pro Ser Pro Glu Ser Ile Glu Val Phe Gly Leu Lys His Thr Ala Arg
          50          55          60
Glu Leu Ala Thr Lys Ala Gly Val Pro Ile Val Pro Gly Ser Pro Gly
65          70          75          80
Leu Ile Asn Asn Glu His Asp Ala Val Glu Val Ala Gln Lys Leu Gly
          85          90          95
Tyr Pro Val Cys Ile Val Lys Gln Glu Arg Ile Leu Leu Ala Gly Leu
          100          105          110
Met Gly Gly Ala Gly His Ala Glu Ser Tyr Arg Trp Trp Trp Trp Asp
          115          120          125
Gly Phe Ala Tyr Met Gln Phe Arg Arg Arg Ser Ala Gln Val Leu Cys
          130          135          140
Asn Cys Gln Val Ala Arg Gly Ser Ile Ile Gln Glu Cys Arg Arg Val
145          150          155          160
Tyr

```

&lt;210&gt; 42862

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42862

```

Ser Ser Ile Ile Thr Val Pro Ile Leu Gly Glu Ser Val Val Asn Ala
1          5          10          15
Gln Phe Pro Thr Arg Val Arg Leu Leu Val Asn Asp Arg Arg Ser Val
          20          25          30
Leu Leu Pro Ala Phe Gly Leu Pro Thr Asn Pro Thr Ser Ala Ser Ser
          35          40          45
Phe Asn Ser Asn Ser Ser Ser Ser Arg Ile Pro Pro Ser Pro Leu Asp
          50          55          60
Ala Asn Phe Gly Arg Val Ile Glu Arg Asp Thr Gln Trp Ala Leu Pro
65          70          75          80
Arg Pro Pro Thr Pro Pro Ala Ala Ser Lys Ile Gly Leu Ser Ile Gly
          85          90          95
Phe Glu Arg Ser Arg Tyr Met Gly Ala Leu Gly Ser Ile Ala Ala Ile
          100          105          110
Phe Cys Leu Arg Gly Gly Phe Phe Gly Lys Thr Val Val Arg Lys Ser
          115          120          125
Glu Gly Leu Glu Pro Gly
          130

```

&lt;210&gt; 42863

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42863

## 19278

```

Ile Val Pro Leu Pro Val Arg Ala Pro Arg Phe Ile Ile Pro Ile Pro
1          5          10          15
Ser Gln Thr His Ser Ala Arg Met Val Glu Asn Leu Arg Pro Arg Asn
20          25          30
Asp Pro Phe Arg Gly Ser Lys Asp Gly Gln Asp Asn Lys Thr Asn Glu
35          40          45
Ser Ser Ser Ser Glu Glu Ser Gly Ser Ser Ser Asp Asp Asp Glu Asp
50          55          60
Glu His Gln Arg Gln Leu Gln Ser Gln Ser Gln Ser Gln Ser His Leu
65          70          75          80
Ser Gly Ser Val Val Ser Gly Arg Arg Ser Ser Asn Phe Gly Leu Asp
85          90          95
Asp His Val Ala Met Ser Val Ser Pro Gly Gly Asp Ser Gln Arg Ala
100         105         110
Gly Ser Met Gly Ser Gly Ser Gly Arg Thr Ser Phe Arg Lys Arg Gly
115         120         125
Gly Asn Ser Asp Val Glu Glu Asp Ser Gly Ala Ala Ser Asp Arg Gln
130         135         140
Glu Asp Gly Ser Gly Gly Ala Gly Gly Pro Tyr Arg Pro Pro Trp Glu
145         150         155         160
Ser Leu Leu Gly Leu Pro Ala Asp Val Trp Glu Lys Leu Leu Ser Pro
165         170         175
Ser Pro Ala Trp His Lys Arg Arg Phe Glu Val Gly Ile Asn Asp Leu
180         185         190
Ala Phe Ile Gly Trp Pro Val Phe Val Arg Glu Asp Gly Thr Trp Arg
195         200         205
Lys Gln Arg Arg Lys Lys Lys Lys Lys Arg Arg Ala Asp Trp Glu Gly
210         215         220
Gly Glu Leu Gly His Asn Glu Asn Ala Glu Asp Ala Pro Asp Asp Glu
225         230         235         240
Asp Gly Asp Ala Gly Gly Asn Ala Ser Gly Gly Gly Gly Leu Met Ala
245         250         255
Ala Ser Thr Glu Thr Leu Ser Pro Lys Gln Val Thr Leu Ser Glu Ala
260         265         270
Lys Arg Gly Ser Gly Ser Ser Gly Lys Ala Ala Arg Ser Leu Val Asp
275         280         285
Cys Leu Asp Gly Asp Asp Lys Asp Ser Met Thr Met Phe Asn Val Val
290         295         300
Phe Val Leu Asp Pro Pro Leu Leu Glu Tyr Ser Met Arg Thr Lys Glu
305         310         315         320
Val Tyr Asp Asn Ile Ile Lys Lys Phe Ala Lys Ala Leu Lys Trp Glu
325         330         335
Gln Ala Arg Thr Asp Tyr Val Trp Arg Glu Ala Gln His Ile Ser His
340         345         350
Leu Lys Glu Lys Ala Lys Glu Arg Ser Lys Ser Gln Cys Ser Arg Thr
355         360         365
Phe Ser Glu Thr Ser Glu Cys
370         375

```

&lt;210&gt; 42864

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42864

Ala Phe Pro Gln Asn Leu Ala Leu Ile Met Phe Lys Val Ile Leu Ala

## 19279

```

1           5           10           15
Val Ser Tyr Ile Arg Leu Arg Ser Val Leu Gly Pro Cys Leu Tyr His
          20           25           30
Val Ile Gln Met Ser Ser Gln His Arg Arg Val Thr Ser Thr Trp Leu
          35           40           45
Leu Val Trp Asn Lys Gln Ala Ile Phe Thr Asp Val Gly Ser Gly Ser
          50           55           60
Trp Met Tyr Leu Lys Tyr
65           70

```

<210> 42865  
 <211> 241  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42865
Thr Arg Val Cys Arg Arg Ser Gln Arg Pro Arg Val Pro Thr Ala Pro
1           5           10           15
Thr Ala Glu Thr Ser Gln Glu Ala Glu Lys Ala Ala Ala Ser Thr Asp
          20           25           30
Lys Asp Ser Glu Ser Thr Ala Thr Ala Ser Ser Lys Thr Asn Val Ser
          35           40           45
Gly Thr Ser Ser Pro Ser Val Gly Ala Ser Ser Thr Ser Thr Val Ser
          50           55           60
Lys Glu Glu Glu Gly Ser Asn Thr Pro Asn Gly Thr Thr Glu Ser Asn
65           70           75           80
Trp Asp Lys Gln Ser Gln Val Ser Gly Thr Asp Lys Gln Gly Asn Ala
          85           90           95
Gln Glu Ala Lys Asp Lys Pro Asn Ala Ser Ser Asp Lys Asp Lys Lys
          100          105          110
Pro Pro Leu Lys Glu Leu Lys Ala Ala Pro Leu Pro Ala Val Asn Val
          115          120          125
Trp Gln Gln Arg Lys Glu Ala Gln Glu Ala Lys Ala Lys Ala Thr Ala
          130          135          140
Ala Leu Lys Ser Ala Ala Ser Ser Lys Pro Ser Ala Ser Lys Thr Ala
145          150          155          160
Ser Val Ala Ser Ser Thr Ser Gly Asp Asn His Gln Glu Leu Pro Lys
          165          170          175
Thr Ala Pro Lys Lys Lys Gly Ala Asp Ala Thr Ser Asp Gly Pro Lys
          180          185          190
Asp Arg Lys Arg Ala Asp Gly Gly Lys Gly Arg Asp Glu Ser Lys Ser
          195          200          205
Lys Ser Gly His Leu Trp Phe Phe Thr Thr Asn Val Ile Ala Met Asp
          210          215          220
Ser Glu Leu Leu Glu Arg Pro Gly Ala Arg Phe Ser Pro Gln Ser Ala
225          230          235          240
Ser

```

<210> 42866  
 <211> 515  
 <212> PRT  
 <213> A.fumigatus

<400> 42866  
 Asn Gly Asn Arg Pro Glu Arg Ile Thr Phe Gly Gly Arg Pro Asn Ile

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 1   | 5   |     |     |     |     |     |     | 10  |     |     |     | 15  |     |     |     |  |
| Tyr | His | Ile | Ser | Lys | Lys | Lys | Leu | Lys | Arg | Gly | Val | Ser | Arg | Asn | Val |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Gln | Glu | His | Ser | Leu | Arg | Arg | Pro | Asn | Ala | Asp | Ala | Ser | Tyr | Val | Gly |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Thr | Ser | Leu | Asn | Thr | Leu | Tyr | Thr | Glu | Leu | Ile | Thr | Gln | Ser | Ser | Leu |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Ala | Arg | Ala | Ile | Tyr | Thr | Val | His | Thr | Ser | Ile | Ser | Ala | Ser | Lys | Ile |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Ala | Ser | Val | Pro | Leu | Ser | Pro | Asp | Val | Ser | Ile | Ser | Leu | Gln | Ile | Pro |  |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Pro | Leu | Thr | Ser | Thr | Pro | Tyr | Leu | Pro | Gly | Pro | Thr | Asp | Lys | Ala | Tyr |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Pro | Gly | Leu | Trp | Leu | Thr | Thr | Ala | Asp | Ser | Val | Thr | Pro | Val | Glu | Asp |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Pro | Thr | Ala | Asp | Glu | Tyr | Thr | Ala | Pro | His | Gln | Val | Leu | Ala | Lys | His |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Phe | Ala | Leu | Leu | Leu | Leu | Asp | Asn | Glu | Ala | Ala | Ile | Leu | Arg | Asp | Val |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |
| Glu | Ala | Ser | Gly | Gly | Ala | Leu | Ala | Pro | Ala | Leu | Ala | His | Tyr | Leu | Arg |  |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |  |
| Cys | Ser | Lys | Pro | Thr | Lys | Ser | Phe | Ala | Gln | Ile | Ser | Ala | Ser | Ser | Gly |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |
| Ile | Pro | Leu | Ser | Thr | Ile | Gln | Met | Leu | Ala | Ser | His | Leu | Val | Tyr | Trp |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |
| Arg | Arg | Ala | Arg | Ala | Ile | Pro | Pro | Ile | His | Gln | Arg | Asp | Thr | Tyr | Ile |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |
| Val | Ser | Pro | Asn | Cys | Asp | Leu | Ser | Lys | Leu | Glu | Val | Ala | Thr | Ala | Ala |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |
| Tyr | Gln | Ala | Ala | Phe | Pro | Thr | Leu | Pro | Ser | Leu | Pro | Lys | Met | Leu | Ser |  |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |  |
| Ala | Leu | Ser | Gly | Thr | Pro | Arg | Pro | Tyr | Gly | Ser | Phe | Ile | Pro | Ser | Lys |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |
| Asp | His | Lys | Glu | Thr | Tyr | Phe | Ala | Ile | Leu | Ala | Trp | Leu | Leu | Arg | Gly |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |
| Gly | Trp | Val | Thr | Gln | Leu | Arg | Ser | Phe | Ala | Arg | Val | Lys | Val | Thr | Pro |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |
| Glu | Ile | Lys | Met | Ala | Val | Glu | Val | Ala | Leu | Arg | Arg | Glu | Glu | Val | Asp |  |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |  |
| Lys | Tyr | Leu | Arg | Lys | Gly | Arg | Ser | Leu | Glu | Ala | Gln | Lys | Ser | Thr | Asp |  |
|     |     |     | 325 |     |     |     |     |     |     | 330 |     |     |     | 335 |     |  |
| Gly | Glu | Asn | Gly | Asn | Glu | Glu | Asp | Glu | Asn | Asp | Asp | Ala | Ser | Ser | Ser |  |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |  |
| Ser | Ser | Ser | Ser | Leu | Ala | Ser | Gln | Gly | Ser | Gly | Glu | Glu | Thr | Pro | Met |  |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |  |



## 19281

450                      455                      460  
 Gly Leu Asp Ala Leu Glu Lys Ile Pro Val Arg Glu Gly Leu Lys Arg  
 465                      470                      475                      480  
 Lys Phe Val Trp Gln Val Leu Thr Arg Leu Gly Leu Val Thr Ser Gln  
                     485                      490                      495  
 Gln Ser Ser Ile Glu Leu Asp Pro Arg Glu Gln Val Leu Val Ser Val  
                     500                      505                      510  
 Arg His Trp  
                     515

&lt;210&gt; 42867

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42867

Ile Pro Arg Gln Arg Ser Phe Arg Val Leu Val Ile Lys Thr Ala Phe  
 1                      5                      10                      15  
 Ala Ile Phe Ile Ile Leu Asn Arg Thr Ser Phe Ser Tyr Tyr Arg Asn  
                     20                      25                      30  
 Glu Thr Ala Leu Asp Asp Tyr Arg Trp Ser Ser Arg Asp Lys Phe Phe  
                     35                      40                      45  
 Leu Pro Arg Ile Thr Phe Tyr Ile Val Ala Gly Tyr Gly Val Ser His  
                     50                      55                      60  
 Gly Asp Leu Phe Thr Gly Gln Arg Leu Gln Ala Thr Val Glu Val Gly  
 65                      70                      75                      80  
 Leu Ile Pro Val Pro Gly Ser Cys Ser Ser Thr Gly  
                     85                      90

&lt;210&gt; 42868

&lt;211&gt; 400

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42868

Ser Leu Trp Thr Leu Asn Tyr Trp Arg Asp Leu Glu Pro Ala Leu Val  
 1                      5                      10                      15  
 His Asn Arg Gln Ala Asn Arg Asp Ser Ala Asp Val Ser Ile Pro Pro  
                     20                      25                      30  
 Val Gly Asp Ala Ser Ser Trp Pro Thr Pro Gln Val Ala Gln Gly Glu  
                     35                      40                      45  
 Glu Lys Arg Lys Ala Gln Glu Lys Thr Glu Lys Thr Glu Lys Ser Pro  
                     50                      55                      60  
 Val Ile Arg Pro His Gly Lys Glu Lys Trp Met Pro Val Pro Tyr Val  
 65                      70                      75                      80  
 Pro Thr Ala Val Phe Asn Thr Pro Leu Pro Ser Ser Ala Arg Arg Gly  
                     85                      90                      95  
 Gly Arg Ala Gly Arg Val Gly Arg Asp Gly Ala Arg Asn Ala Thr His  
                     100                      105                      110  
 Gly Ala Pro Gly Ala Asp Lys Ala Ala Thr Gly Gln Ala Ala Gln Gly  
                     115                      120                      125  
 Ser Thr Ala Lys Gln Asn Gly Val Gly Asp Arg Gly Arg Asn Glu Pro  
                     130                      135                      140  
 Ser Ser Ala Arg Ala Asn Ser Leu Pro Ala Pro Ser Lys Arg Ser Asn  
 145                      150                      155                      160  
 Ser Val Asp Ala Gly Leu Ala Asp Ser Arg Lys Gly Thr Gln Val Ala

## 19282

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                165                170                175
Asp Arg Asn Arg Ala Pro Lys Gly Ala Glu Asn Met Asn Gly Leu Pro
                180                185                190
Ala Gly Arg Gln Ala Gly Gly Asn Glu Asn Leu Pro Pro Arg His Arg
                195                200                205
Gly Asp Ala Lys Pro Phe Val Arg Asn His Asp Ala Ala His Lys Gly
                210                215                220
Gly Asp Ser Thr Ser Lys Ser Ser His Pro Leu Ala Asp Ala Asn Thr
225                230                235
Gly Leu Arg Ser Ser Ser Thr His Asp Arg Arg Phe Glu Asn Gly Pro
                245                250                255
Lys Ser Ala Asp Leu Ala Gly Phe Pro Gly Asp Arg Lys Glu Lys Asp
                260                265                270
Phe Ser Arg Glu Ser Arg Ala Asp Arg Gly Arg Gly Ser His Arg Gly
                275                280                285
Arg Gly Gly His Ser Gly Phe Thr Gly Ser Gln Asn Ser Gln Phe Pro
290                295                300
Asn Asn His Met Gly His His Ser Phe Val His Pro Lys Ser Phe Gly
305                310                315
Phe Asn Glu Arg Gln Arg Ser His His Gly Leu Pro Asn Gly Ser Gln
                325                330                335
Gln Gly His Arg Met Ser Leu Arg Ser Pro Ser Leu Pro Asn Ser Ala
                340                345                350
Ser Met Tyr Gly Val Tyr Pro Phe Pro Ala Asp Ile Asn Thr Met Tyr
                355                360                365
Gly Tyr Gln Pro Ile Pro Ala Gly Pro Met Thr Ala Val Pro Tyr Gln
370                375                380
Pro Tyr Met Glu Pro Phe Ser Leu Met Ser Met Ile Ser Met Gln Leu
385                390                395                400

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&lt;210&gt; 42869

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42869

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Val Met Ser Phe Val Phe Ile Val Leu Leu Leu Arg Phe Ala Thr Glu
1                5                10                15
Ile Asp Pro Gly Arg Glu Tyr Tyr Phe Ser Val Asp Asn Leu Cys Lys
                20                25                30
Asp Leu Phe Leu Arg Lys Gln Met Asp Ser Gln Gly Phe Val Pro Leu
                35                40                45
Ser Val Ile Ala Gly Phe Lys Arg Val Lys Thr Leu Thr Glu Asp Phe
50                55                60
Glu Met Leu Arg His Ala Cys Arg Gln Val Arg Asn Ile Glu Tyr Leu
65                70                75                80
Thr Gly Glu Asp Gly Ile Asp Arg Leu Arg Pro Arg Asp Lys Trp Glu
                85                90                95
Gln Trp Val Leu Pro Val Glu Gln Arg Asp Pro Ser Ala Gln Asn Glu
100                105                110
Gly Pro Ser Leu Ser Ala Asp Ala Gly Lys Phe Asp Glu Gln Asn Gln
115                120                125
Ala Lys Glu Thr Thr Asn Gly Leu Pro Asn Gly Ser Thr Glu Pro Gln
130                135                140
Val Leu Lys Thr Ser Leu Ser Ser Thr Ala Pro Glu Phe Ser Pro Ser
145                150                155                160

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## 19283

Asn Pro Val Ile Pro Gln Ala Glu Ile Ala Asn Val Gly Ser His Leu  
                   165                  170                  175  
 Met Thr Val Pro Ser Gln Met Leu Lys Leu Arg Ser  
                   180                  185

<210> 42870  
 <211> 144  
 <212> PRT  
 <213> A.fumigatus

<400> 42870  
 Leu Val Ser Asp Thr Ala His Asp Ser Leu His Lys Asp His Ser Ser  
 1                  5                  10                  15  
 Val Leu Trp Asp Gly Lys Gln Ala Ile Gln Pro Ser Leu Leu Pro  
                   20                  25                  30  
 Ser Asp Asn Ser Val Pro Glu Ser Tyr Ser Thr Phe Gln Lys Arg Val  
                   35                  40                  45  
 Leu Tyr Glu Gln Lys Leu Thr Pro Asp Gln Asp Asp Arg Glu Met  
                   50                  55                  60  
 Asp Ile Leu Tyr Gln Phe Trp Ser His Phe Leu Val Ser Asn Phe Asn  
 65                  70                  75                  80  
 Ala Gln Met Tyr Asn Glu Phe Lys Ser Leu Ala Leu Asp Asp Leu Ser  
                   85                  90                  95  
 Phe Gln Asn Ala Ser Asn Gly Phe Asn Arg Ile Gly Arg Phe Met Val  
                   100                  105                  110  
 Pro Phe Cys Arg Thr Lys Asn Ile Ser Leu Leu Arg Trp Ser Lys Thr  
                   115                  120                  125  
 Ser Leu Phe Tyr Glu Gly Gly Asn Cys Leu Pro Thr Arg Val Gly Ile  
                   130                  135                  140

<210> 42871  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 42871  
 Gln Ile Gly Phe Cys Leu Tyr Ser Arg Ser Gln Ser Ser Ala Leu Pro  
 1                  5                  10                  15  
 His Pro Ser Ala Ile Gly Ser Ile Ile Ala Thr Phe Ser Phe Ser Leu  
                   20                  25                  30  
 Phe Pro Ser Tyr Phe Pro Ser Leu Ser Leu Tyr Arg Cys Leu Leu Thr  
                   35                  40                  45  
 Pro Leu Leu Pro Ser Leu Pro Leu Thr Tyr Trp Asp Val Leu Arg Ser  
                   50                  55                  60  
 Ser Phe Tyr Ser Ser Leu His Ser His Phe Val Tyr Arg Arg Pro Leu  
 65                  70                  75                  80  
 Gly Val Cys Val Ala  
                   85

<210> 42872  
 <211> 851  
 <212> PRT  
 <213> A.fumigatus

<400> 42872  
 Arg His Leu Thr Pro Leu Gln Glu Thr Arg Arg Thr Leu Asp Gln Ala

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| Gln | Lys | Gln | Tyr | Asp | Ser | Leu | Leu | Ser | Arg | Tyr | Ala | Ser | Gln | Ser | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Lys | Glu | Pro | Ser | Ser | Leu | Arg | Glu | Asp | Ala | Phe | Gln | Leu | His | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Arg | Lys | Ala | Tyr | Leu | Lys | Ala | Ser | Met | Asp | Phe | Ser | Val | Gln | Ala |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Gln | Ile | Arg | Asn | Ser | Leu | Asp | Arg | Leu | Leu | Val | Arg | Val | Ser | Phe |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Asp | Gln | Trp | Arg | Glu | Phe | Lys | Thr | Leu | His | Asn | Asp | Asn | Gly | Ala | Ser |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe | Ala | Lys | Trp | Gly | Gln | Glu | Met | Asp | Arg | Ile | Lys | Gly | Trp | Ile | His |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Met | Glu | Gly | Ser | Glu | Lys | Phe | Ser | Lys | Arg | Glu | Leu | Leu | Ser | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Lys | His | Ile | Glu | Asp | Ala | Ala | Glu | Leu | Ala | Ala | Arg | Pro | Ser | Arg |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Glu | Leu | Glu | Asp | Tyr | Ser | Val | Ser | Thr | Val | Pro | Tyr | Leu | Gly | Ser | Arg |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Pro | Leu | Ser | Asp | Leu | Asn | Met | Thr | Lys | Glu | Ala | Arg | Pro | Glu | Lys | Gln |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Trp | Val | Tyr | Leu | Arg | Thr | Leu | Ser | Gly | Lys | Pro | Thr | Arg | Thr | Val |
|     |     |     | 180 |     |     |     |     |     | 185 |     |     |     | 190 |     |     |
| Trp | Leu | Arg | Arg | Trp | Ala | Phe | Leu | Lys | Asn | Gly | Ile | Phe | Gly | Cys | Leu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Val | Leu | Gly | Ser | Arg | Thr | Gly | Gly | Val | Glu | Glu | Ser | Glu | Arg | Ile | Gly |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Val | Leu | Leu | Cys | Ser | Ile | Arg | Pro | Ala | Phe | Gln | Glu | Glu | Arg | Arg | Phe |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     | 240 |     |
| Cys | Phe | Glu | Val | Lys | Thr | Lys | Ser | Asn | Thr | Ile | Val | Leu | Gln | Ala | Glu |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Thr | Gln | Lys | Glu | Leu | Thr | Glu | Trp | Ile | Ala | Ala | Phe | Glu | Ala | Ala | Lys |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Arg | Lys | Ala | Leu | Glu | Asn | Pro | Thr | Ser | Thr | Asp | Ile | Ser | Val | Ser | Gly |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |
| Arg | Val | Thr | Ile | Gln | Asp | Pro | Ala | Phe | Ala | Ile | Ser | Gln | Pro | Pro | Ala |
|     |     | 290 |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Pro | Glu | Phe | Ala | Ala | Asp | Pro | Ala | Asp | Ser | Leu | Thr | Pro | His | Ala | Asn |
| 305 |     |     |     | 310 |     |     |     |     |     | 315 |     |     |     | 320 |     |
| Asp | Glu | His | Gly | Pro | Ser | Asp | Arg | Ser | Gly | Gly | Leu | Ser | Val | Pro | Glu |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Arg | Glu | Pro | Ser | Ala | Phe | Arg | Asn | Ser | Ser | Asp | Leu | Gly | Ser | Pro | Arg |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Arg | Met | Thr | Gly | Leu | Glu | Pro | Glu | Ser | Ser | Ala | Arg | Glu | His | Thr | Ser |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     |     | 365 |     |     |
| Arg | Leu | Ile | Gln | Lys | Leu | Asp | Leu | His | Arg | Lys | Ser | Asn | Asn | Asn | Ala |
|     |     | 370 |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Val | Pro | Pro | Ser | Ile | Ser | Leu | Pro | Gly | Ala | Gly | Gly | Gly | Ile | Ala | Gly |
| 385 |     |     |     | 390 |     |     |     |     |     | 395 |     |     |     | 400 |     |
| Leu | Ile | Ser | Ser | Ser | His | Ser | Thr | Leu | Gly | His | Ser | Asn | Gly | Leu | Ser |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Val | Gly | Gly | Thr | Asp | Glu | Gly | Asn | Arg | Ser | Arg | Ser | Leu | Thr | Ser | Arg |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Ser | Leu | Pro | Pro | Thr | Thr | Leu | Ala | Pro | Ser | Thr | Leu | Ala | Asn | Pro | Pro |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Ala | Pro | Thr | Ser | Met | Ser | Lys | Val | Ala | Val | Ile | Val | Ser | Asn | Glu | Arg |

## 19285

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      450              455              460
Gly Ile Gly Leu Gly Gln Ala Asp Lys Thr Gly Gly Met Pro Ser Gly
465              470              475              480
Met Met Ala Asn Leu Trp Gly Ser Ser Asn Trp Gly Phe Met Asn Arg
      485              490              495
Leu Glu Arg Glu Arg Asp Ala Gln Leu Ala Arg Ala Gly Glu Leu Ala
      500              505              510
Ser Val Gly Gln Arg Thr Ser Thr Pro Val Ile Asp Pro Ser Lys Gln
      515              520              525
Pro Gln Ser Ser Asp Ala Asp Ser Thr Asn Gly Thr Ser Ala Ser Arg
      530              535              540
Gln Gln Met Ser Gly Pro Arg His Arg Gln Thr Val Ser Leu Asp Gly
545              550              555              560
Asp Ala Ser Lys Val Gln Arg Ala Ile Leu Gly Ile Ser His Glu Tyr
      565              570              575
Pro Ser Tyr Tyr Pro Glu Gln Leu Arg Ser Gln Asp Ala Gln Phe Arg
      580              585              590
Leu Leu Phe Pro Asp Val Lys Arg Glu Glu Pro Leu Val Met Val Phe
      595              600              605
Arg Ala Thr Trp Asn Pro Asn Asp Gln Gln Glu Phe Pro Gly Arg Ala
      610              615              620
Tyr Ala Thr Thr Arg Asn Ile Tyr Phe Tyr Ser His Tyr Phe Gly Leu
625              630              635              640
Val Leu Thr Thr Gly Val Pro Leu Glu Ser Ile Lys Glu Val Thr Ala
      645              650              655
Ala Pro Gly Arg Asp Cys Asp Phe Leu Phe Leu His Thr Ile Pro Pro
      660              665              670
Leu Gly Glu Asp Thr Pro Gly Arg Ile Thr Val Lys Thr Phe Leu Glu
      675              680              685
Pro Leu Arg Leu Leu Gln Arg Arg Leu Asn Phe Leu Ile Gln Asp Ser
      690              695              700
Thr Ser Val Glu Pro Met Gly Leu Glu Ala Ile Phe Lys Ala Leu Ile
705              710              715              720
Arg Met Glu Thr Asp Thr Arg Asn Arg Ser Ser Ser Leu Asn Ser Trp
      725              730              735
Glu Asp Ala Ala Val Ser Asp Asp Lys Asn Gly Ile Glu Glu Asp Lys
      740              745              750
Leu Ala Ala Gly Gln Gln Lys Asp Ile Arg Arg Pro Ile Tyr Ile Asp
      755              760              765
Tyr Asp Leu Asp Pro His Ser Lys His Gly Lys His Gly Lys Asn Ala
770              775              780
Pro Lys Phe Arg Leu Pro Thr Gln Pro Val Gln Tyr Val Pro Gln Gly
785              790              795              800
Asn Leu Arg Leu Ala Ala Glu Lys Ile Phe Asp Ile Ser Pro Lys Ala
      805              810              815
Ile Phe His Ile Leu Phe Gly Asp Lys Ser Ala Val Trp Gln Leu Leu
      820              825              830
Leu His Glu Arg Arg Ser Arg Gly Ser Ser Leu Tyr Pro His Pro Arg
      835              840              845
Met Ile Gly
      850

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&lt;210&gt; 42873

&lt;211&gt; 373

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42873

Leu His Leu Ser Arg Arg Gly Lys Ala Ser Leu Gln Tyr Thr Arg Lys  
 1 5 10 15  
 Trp Ser Gly Leu Gly Leu Leu Thr Ala Phe Arg Val Ser Gly Pro Leu  
 20 25 30  
 Ala Ile Ala Arg Leu Leu Ser Cys Thr Ile Thr Lys Leu Phe Pro Gly  
 35 40 45  
 Ile Ile Glu Lys Gln Ala Thr Ser Asp Leu Glu Gln Asp Ala Leu Asp  
 50 55 60  
 Leu Val Asp Leu Val Ser Asp Gln Val Arg Lys Leu Gly Phe His Ser  
 65 70 75 80  
 Arg Thr Lys Lys Ala Ile Thr Ile Phe Gly His Ile Gly Arg Gln Gln  
 85 90 95  
 His Thr Ser Gln Leu Ser Ser Ser Glu Ser Val Leu Lys Leu Glu Pro  
 100 105 110  
 Arg Lys Pro Arg Arg Gln Arg Thr Leu Thr Gln Leu Leu Glu Thr  
 115 120 125  
 Leu Leu Ser Phe Leu Glu Ser Ala Val Ser Ser Ile Ile Met Trp Thr  
 130 135 140  
 Phe Ala Leu Leu Arg Trp Thr Trp Lys Thr Thr Asn Ala Asn Met Val  
 145 150 155 160  
 Ile Leu Ala Leu Leu Ile Ser Ser Ala Leu Met Asn Gly Leu Phe Thr  
 165 170 175  
 Ser Arg Tyr Thr Tyr Asp Trp Trp His Glu Arg Asn Val Gly Asn Phe  
 180 185 190  
 Met Ala Arg Leu Gly Val Gly Pro Asn His Val Met Ser Lys Ala Ile  
 195 200 205  
 Tyr Met Arg Asp Ile Asp Glu Val Ile Ala Asn Ala Thr Val Gly Gln  
 210 215 220  
 Ser Ser Asn Asn Met Ser Lys Cys Phe Ser Thr Phe Tyr Gln Gln Thr  
 225 230 235 240  
 Val Ser Asp Gln Gly Thr Val Leu Ser Phe Gly Ala Ser Gly Pro Arg  
 245 250 255  
 Asp Ser Val Thr Arg Ser Ala Ala Arg Arg Ile His Gln Thr Arg Glu  
 260 265 270  
 Arg Leu Ala Met Tyr Arg His Asn Leu Leu Val Ala Leu Arg Val Val  
 275 280 285  
 Asn Ser Ile Glu Arg Glu Val Ile Gln Gly Glu Trp Glu Arg Trp Leu  
 290 295 300  
 Arg Gln Glu Leu Arg Arg Cys His Gln Val Glu Lys Leu Leu Gly Lys  
 305 310 315 320  
 Asp Lys Glu Asp Asp Gly Phe Asn Thr Gln Val Asp Gln Ala Ser Gln  
 325 330 335  
 Thr Val Phe Ala Asp Leu Ala Gly Asp Val Gln Gln Trp Tyr Asp Lys  
 340 345 350  
 Tyr Cys Thr Ser Cys Gln Val Glu Gln Glu Gln Leu Glu Arg Ser Gly  
 355 360 365  
 Ile Val Tyr Gly Asn  
 370

&lt;210&gt; 42874

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42874

```

Ser Leu Ser Trp Gly Val Leu Gln Glu Ala Ile Thr Thr Val Asn Phe
1          5          10          15
Pro Val Arg Pro Pro Thr Ala Glu Glu Pro Asn Pro Pro Thr Glu Arg
          20          25          30
Phe Thr Phe Ser Ile Val Leu Asn Thr Ile Gln Ser Thr Phe Ala Ala
          35          40          45
Ile Thr Gly Phe Leu Tyr Leu Tyr Phe Ser Thr Pro Ala Gly Lys Lys
          50          55          60
Val Pro Ser Ile Phe Pro Thr Arg Lys Ile Leu Phe Pro Leu Leu Leu
65          70          75          80
Val Ser Ile Ser Ser Ser Leu Ala Ser Pro Phe Gly Tyr Ala Ser Leu
          85          90          95
Ala His Ile Asp Tyr Leu Thr Phe Ile Leu Ala Lys Ser Cys Lys Leu
          100          105          110
Leu Pro Trp Met Phe Phe Asn Trp Ile Phe Phe Gly Lys Thr Tyr Pro
          115          120          125
Leu Tyr Lys Tyr Gly Val Val Leu Leu Ser Pro Leu Gly Ser Arg Asn
          130          135          140
Phe His Leu Pro Pro Pro Trp Asn Gln
145          150

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&lt;210&gt; 42875

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42875

```

His Leu Phe Trp Pro Ser Arg Ala Ser Phe Cys Leu Gly Cys Phe Ser
1          5          10          15
Ile Gly Tyr Ser Ser Ala Arg His Ile Arg Cys Ile Ser Thr Gly Leu
          20          25          30
Ser Cys Cys His Pro Leu Gly Val Ala Thr Phe Thr Phe His His Pro
          35          40          45
Gly Thr Ser Lys Lys Val Ala Ala Ser Ala Ala Lys Asn Gln Ser Gly
          50          55          60
Ser Ser Leu Tyr Gly Ile Phe Phe Leu Ser Ile Asn Leu Phe Leu Asp
65          70          75          80
Gly Leu Thr Asn Thr Thr Gln Asp His Val Phe Ser Ser Pro Gln Ile
          85          90          95
Tyr Thr Arg Phe Thr Gly Pro Gln Met Met Val Ala Gln Asn Ile Leu
          100          105          110
Ser Thr Ile Leu Thr Thr Thr Tyr Leu Leu Val Met Pro His Leu Ser
          115          120          125
Ser Thr Gly Ala Leu His Ala Leu Leu Pro Ile Pro Ile Pro Pro Ser
          130          135          140
Thr Glu Thr Glu Leu Ala Ser Ala Val Ser Phe Leu Ser Arg His Pro
145          150          155          160
Glu Val Met Lys Asn Val Leu Gly Phe Ala Ala Cys Gly Ala Ile Gly
          165          170          175
Gln Leu Phe Ile Phe Tyr Thr Leu Ser Arg Phe Ser Ser Leu Leu Leu
          180          185          190
Val Thr Val Thr Val Thr Arg Lys Met Leu Thr Met Leu Leu Ser Val
          195          200          205
Phe Trp Phe Gly His Thr Leu Ser Ala Gly Gln Trp Leu Gly Ile Gly
          210          215          220

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## 19288

Leu Val Phe Gly Gly Ile Gly Ala Glu Ala Val Val Gln Lys Arg Glu  
 225 230 235 240  
 Lys Gln Ser Lys Glu His Ile His His Arg Gly Arg Arg Ser Ala Gln  
 245 250 255

Gly

<210> 42876

<211> 566

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (166)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42876

His Ser Leu Arg Ser Val Thr Val Glu Ser Lys Leu Gly Lys Thr Ser  
 1 5 10 15  
 Ala Leu Gly Lys Arg His Asp Arg Asp Glu Asp Asp Ser Asp Asp Ser  
 20 25 30  
 Glu Glu Ser Ser Ser Asp Glu Glu Glu Asp Glu Asp Gly Glu Leu Val  
 35 40 45  
 Thr Pro Ala Val Asp Ala Glu Ile Met Ala Thr Leu Asn Ala Ile Arg  
 50 55 60  
 Ser Lys Asp Pro Arg Val Tyr Asp Lys Asn Thr Lys Phe Tyr Thr Ala  
 65 70 75 80  
 Leu Asp Glu Glu Glu Glu Asn Ala Asn Thr Gly Ser Thr Glu Lys Lys  
 85 90 95  
 Gln Lys Pro Met Thr Leu Arg Asp Tyr His Arg Gln Asn Leu Leu Ser  
 100 105 110  
 Gly Ala Asn Leu Glu Glu Asp Asp Thr Ser Asp Thr Pro Lys Thr Tyr  
 115 120 125  
 Ala Gln Glu Gln Glu Glu Leu Lys Asn Ala Ile Val Lys Glu Met His  
 130 135 140  
 Pro Thr Ala Asp Gln Asn Gly Glu Asp Lys Asp Glu Asp Gly Gly Phe  
 145 150 155 160  
 Leu Ile Pro Lys Ser Xaa Thr Lys Ser Ala Ser Glu Pro Lys Glu Glu  
 165 170 175  
 Ile Lys Leu Asp Val Glu Asn Ala Asp Lys Asp Pro Glu Thr Phe Leu  
 180 185 190  
 Ser Asn Phe Leu Ser Ser Arg Ala Trp Ile Pro Ala Gly Arg Ser Glu  
 195 200 205  
 Leu Gln Pro Phe Glu Ser Glu Asp Glu Glu Glu Leu Glu Arg Ala Glu  
 210 215 220  
 Ala Phe Glu Glu Ala Tyr Asn Phe Arg Phe Glu Asp Pro Ser Lys Leu  
 225 230 235 240  
 Asn Ala Thr Leu Val Thr His Ala Arg Asp Lys Thr Asn Gln Gln Ser  
 245 250 255  
 Val Arg Arg Glu Lys Ser Ala Arg Lys Lys Gln Arg Glu Ala Glu  
 260 265 270  
 Arg Lys Arg Lys Glu Glu Glu Lys Lys Gln Arg Glu Ala Glu Lys Asn  
 275 280 285  
 Arg Leu Arg Lys Leu Lys Met Glu Glu Leu Gln Glu Lys Val Lys Lys  
 290 295 300



Ile Lys Glu Val Ala Gly Leu Gln Ala Ser Lys Phe Thr Asp Glu Asp  
 305 310 315 320  
 Trp Ala Arg Phe Leu Asp Glu Ala Trp Asp Asp Asp Lys Trp Glu Glu  
 325 330 335  
 Glu Met Gln Lys Arg Phe Gly Glu Asp Tyr Tyr Ala Glu Glu Asp Ala  
 340 345 350  
 Ser Gly Thr Asp Gly Glu Gly Lys Arg Lys Lys Lys Arg Pro Lys Lys  
 355 360 365  
 Pro Thr Trp Asp Asp Asp Ile Asp Ile Lys Asp Leu Val Pro Asp Phe  
 370 375 380  
 Asp Glu Glu Glu Pro Lys Pro Ala Leu Glu Asp Ser Asp Val Glu Met  
 385 390 395 400  
 Glu Asp Asp Ala Glu Asp Thr Asn Lys Lys Ser Lys Ala Gln Glu Arg  
 405 410 415  
 Arg Asp Gln Lys Arg Glu Ala Arg Lys Asp Arg Leu Arg Ile Glu Glu  
 420 425 430  
 Ala Ile Asp Arg Asn Leu Asp Leu Asp Ile Ser Leu Leu Pro Gly Ala  
 435 440 445  
 Thr Lys Lys Asn Thr Thr Arg Phe Arg Tyr Arg Glu Thr Ser Pro Gln  
 450 455 460  
 Ser Phe Gly Leu Thr Ala Arg Asp Ile Leu Met Ala Asp Asp Ala Gln  
 465 470 475 480  
 Leu Asn Gln Phe Ala Gly Leu Lys Lys Leu Ala Ser Phe Arg Asp Pro  
 485 490 495  
 Glu Lys Lys Arg Arg Asp Gln Lys Lys Leu Gly Lys Lys Ala Arg Leu  
 500 505 510  
 Arg Gln Trp Arg Lys Glu Thr Phe Gly Asn Glu Glu Gly Pro Val Phe  
 515 520 525  
 Ser Phe Gly Ser Glu Lys Pro Val Gly Asn Ala Glu Gln Ala Asp Asp  
 530 535 540  
 Gly Asp Lys Val Asp Ile Arg Glu Gly Glu Pro Arg Arg Lys Lys Arg  
 545 550 555 560  
 Lys Arg Ser Lys Lys His  
 565

&lt;210&gt; 42877

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42877

Gln Leu Thr Met Pro Thr Val Leu Thr Ser Thr Pro Gln Ala Pro Glu  
 1 5 10 15  
 Pro Ser Ala Leu Thr Thr Leu Leu Thr Ser Thr Ser Ser Ser Asn  
 20 25 30  
 Pro Leu Ser Ala Thr Ala Ile Gln Val Leu His Asn Leu Gln His Gln  
 35 40 45  
 His Leu Trp Thr Ser Leu Gln Ile His Asp Leu Gln Ile Ser Asn Ser  
 50 55 60  
 Ser Val Ser Pro Ser Ser Thr Ser Thr Asp Lys Leu Ser Ser  
 65 70 75 80  
 Ser Pro Ser Tyr Leu Ile Ser Gly Ile Pro Pro His Arg Ile Tyr Thr  
 85 90 95  
 His Pro Asp Glu Gln Leu Phe Met Leu Glu Arg Gly Leu Arg Glu Asp  
 100 105 110  
 Asp Ile Glu Leu Glu Arg Met Phe Val Ile Pro Thr Ala His Gly Gln

## 19290

```

      115              120              125
Ser Trp Ser Leu Arg Lys Met Ala Ala Val Phe Asp Ala Leu Pro Glu
      130              135              140
Asp Glu Asp Glu Ser Asn Ala Gln Ser Leu Asp Asp Ala Lys Ala Ser
145              150              155              160
Gly Asn Asn Ala Glu Lys Ala Ala Lys Leu Thr Glu Tyr Tyr Glu Tyr
      165              170              175
Arg Arg Lys Ala Arg Val Thr Lys Glu Trp Gly Gly Lys Arg Leu Leu
      180              185              190
Leu Ala Met Val Asp Arg Ser Met Gly Gly Asp Gly Thr Met Val Tyr
      195              200              205
Tyr Val Val Gln Glu Gly Ala Val Lys Pro Arg Gln Asn
      210              215              220

```

&lt;210&gt; 42878

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42878

```

Lys Ala Leu His Lys Ser Ala Glu Ser Ala Ala Leu Gly Ile Phe Val
1              5              10              15
Ser Ser Ser Leu Ile Phe Ala Phe Leu Asn Trp Thr Lys Met Glu Pro
      20              25              30
Pro Ala Lys Lys Pro Arg Lys Leu Leu Asp Asp Asp Ser Ser Ser Asp
      35              40              45
Ser Gly Asp Glu Ser Gly Gly Val Pro Ile Thr Asp Gln Ser Glu Pro
      50              55              60
Ala Phe Lys Ile Asn Glu Glu Tyr Ala Arg Arg Phe Glu His Asn Lys
      65              70              75              80
Lys Arg Glu Glu Leu Gln Lys Cys Lys Ser Ala Leu Leu Arg Ser Thr
      85              90              95
Thr Val Ser Val Thr Gln Ser Glu Ile Cys Tyr Ser Gly Val Lys Ile
      100              105              110
Arg Lys Asp Phe Ser Ala Arg Glu Thr Pro
      115              120

```

&lt;210&gt; 42879

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42879

```

Ser Pro Gly Leu Cys Gly Pro His Pro Leu Lys Val Asn Arg Ser Cys
1              5              10              15
Ser Gln Ser Gln Thr Pro Leu Gly Leu Gln Trp Ser Ile Gln Glu Gln
      20              25              30
Tyr Leu Asn Leu His Leu Ile Leu Pro Pro Leu Ala Arg Phe Val Tyr
      35              40              45
Asp Phe Cys Gly Arg Cys Leu Ile Ala Leu Leu Gln
      50              55              60

```

&lt;210&gt; 42880

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42880

Ser Ser Gln Ser Ser Tyr Leu Leu Leu Cys Ala Pro Val Arg Ala Asp  
 1 5 10 15  
 Phe Ile Leu Phe Val Tyr Gly Val Ser Thr Glu Trp Leu Asp Asp Lys  
 20 25 30  
 Tyr Leu Arg Arg Tyr Met Ile Leu Leu Leu Asp Pro Ala Pro Ala Pro  
 35 40 45  
 Pro Pro Ile Ile Val Ile Gln Asn Pro Pro Leu Leu Leu Tyr Phe Thr  
 50 55 60  
 Arg Arg Ser Gly Pro Ser Asn Leu Arg Phe Phe Arg Ser Ile Phe Leu  
 65 70 75 80  
 His Leu

&lt;210&gt; 42881

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42881

Leu Gln Thr Ile Thr Ser Leu Gln Ser Ile Cys Thr Lys Asp Arg Leu  
 1 5 10 15  
 Val Ile Gly Ile His Gln Ser His Cys Pro Thr Met Leu Ala Arg Gln  
 20 25 30  
 Glu Asp Ala Asp Leu Ser Asp Arg Pro Ser Thr Arg Ala Ser Asn Asp  
 35 40 45  
 Leu Pro Asp Tyr Ala Ala His Ile Arg Ser Arg Ser Thr Val His Ala  
 50 55 60  
 His Ser Pro Lys Arg Leu Ser Val Phe Ser Gly Arg Ser Arg Ser Asn  
 65 70 75 80  
 Thr Ser Thr Ser Thr Ser Ser Ser Arg Arg Ser Pro Ala Ser Ser Met  
 85 90 95  
 Thr Ser Ala Asp Ala Ala Ser Leu Pro Tyr Ser Ser Glu Asp Arg Ala  
 100 105 110  
 Ser Ser Ser Ala Gly Thr Arg Ser Asp Arg His Glu Arg His Glu Ser  
 115 120 125  
 Met Thr Lys Ser Leu Phe Thr Arg Gly Ser Arg Ile Leu Arg Arg Gln  
 130 135 140  
 Gly Ser Lys Phe Asn Ile Ala Ala Thr Leu Asp Glu Glu Asp Glu Val  
 145 150 155 160  
 Glu Arg Glu Lys Ser Arg Phe Glu Val Ser Glu Ile Phe Ser Arg His  
 165 170 175  
 His Lys Thr Arg Gln Ser Asn Ala Arg Lys Ser Asn Ala Pro Ala Gln  
 180 185 190  
 Ser Asn Ile Arg Trp Arg  
 195

&lt;210&gt; 42882

&lt;211&gt; 489

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42882

Ser Thr Thr Val Val Asn Arg Leu Phe Phe Leu Thr Phe Arg Pro Arg  
 1 5 10 15

Ser Pro Pro Ser Lys Ser Phe Asn Met Ala Ser Thr Pro Ser Gln Thr  
 20 25 30  
 Leu Thr Lys Arg Gln Ser Glu Gln Ser Leu Met Pro Pro Pro Pro Pro  
 35 40 45  
 Pro Lys Arg Ile Arg Arg Pro Ala Thr Val Leu Asp Glu Asp Val Tyr  
 50 55 60  
 Thr Asn Ala Leu Ser Glu Ile Ile Ala Arg Asp Tyr Phe Pro Gly Leu  
 65 70 75 80  
 Leu Glu Glu Arg Val Lys Gln Glu Tyr Leu Asp Ala Leu Glu Ser Lys  
 85 90 95  
 Asp Lys Ala Trp Ile Thr Ser Ser Lys Lys Lys Leu Thr Asp Leu Leu  
 100 105 110  
 Lys Thr Pro Gly Arg Ala Arg Thr Val Pro Arg Leu His Gly Thr Glu  
 115 120 125  
 Arg Pro Tyr Asp Thr Pro Thr Gly Trp Gln Gly Asp Thr Pro Arg Ser  
 130 135 140  
 Val Ile Ser Thr Thr Thr Ala Ala Met Ser Glu Ser Ala Pro Lys Asp  
 145 150 155 160  
 Ile Pro Asp Val Ser Asn Leu Gly Leu Met Ala Phe Gln Ala Lys Tyr  
 165 170 175  
 Thr Ser Glu Asp Asn Glu Ser Phe Asn Lys Leu Leu Asp Lys Gln Asn  
 180 185 190  
 Ala Lys Arg Gln Glu Lys Tyr Ala Trp Leu Trp Ser Gly Asn Lys Ile  
 195 200 205  
 Pro Thr Ala Arg Gln Ile Ala His Arg Gln Arg Glu Ala Lys Arg Ile  
 210 215 220  
 Ala Ala Gln Gly Gly Ser Ile Glu Arg Gln Leu Ala Ile Lys Thr Asp  
 225 230 235 240  
 Leu Asp Ala Arg Pro Ala Lys Pro Asp Thr Trp Lys Ser Arg Pro Glu  
 245 250 255  
 Asn Ser Leu Met Phe Met Pro Ser Ser Ile Glu Asp Thr His Glu Thr  
 260 265 270  
 Ile Ser Gln Lys Ala Glu Ala Leu Ser Arg Ala Gly Pro Lys Arg Val  
 275 280 285  
 Val His Glu Asn Thr Arg Leu Pro Glu Pro Ser Val Gln Gln Glu Gly  
 290 295 300  
 Asn Asn Val Pro Pro Ser Pro Ser Ile Ser Ala Ile Lys Asp Ala Ile  
 305 310 315 320  
 Ala Gly Arg Pro Arg Leu Thr Glu Ser Glu Ala Gly Tyr Ala Gly Gly  
 325 330 335  
 Glu Thr Pro Arg Val Asn Gly Tyr Ala Phe Val Asp Glu Asp Glu Pro  
 340 345 350  
 Glu Pro Asp Tyr Gly His Ala Ala Ala Glu Ser Ser Glu Leu Thr Ser  
 355 360 365  
 Leu Ser Gly Asp Asp Leu Arg Leu Leu Gly Ala Ser Asp Ser Ala Pro  
 370 375 380  
 Asn Pro Phe Ser Ile Arg Glu Asn Cys Lys Arg Glu Glu Leu His His  
 385 390 395 400  
 Arg Met Val Asp Arg Val Ala Arg Thr Lys Arg Ala Glu Lys Ala Ala  
 405 410 415  
 Arg Glu Ile Thr Thr Pro Val Thr Pro Arg Phe Ala Ser Ser Pro Arg  
 420 425 430  
 Leu Asp Phe Gly Leu Arg Thr Pro Ala Ala Ala Ala Ser Ser Gly Gln  
 435 440 445  
 Gly Lys Ala Leu Thr Pro Ala Ala Gln Lys Leu Leu Gln Arg Val Gly  
 450 455 460

## 19293

Ser Thr Pro Arg Pro Ala Ala Ser Ser Ser Ser Ser Leu Arg Asn Met  
 465 470 475 480  
 Trp Thr Pro Thr Pro Arg Lys Ala Lys  
 485

<210> 42883  
 <211> 662  
 <212> PRT  
 <213> A.fumigatus

<400> 42883  
 His Gly Tyr Thr Asp Glu His Leu Lys Ser Leu Ile Ser Asn Pro Phe  
 1 5 10 15  
 Asp Phe His His Leu Thr His Thr Ser Pro Ser Gln Phe Gln Ala Leu  
 20 25 30  
 Asp Lys Ala Arg Glu Asn Asp Ile Val Thr Glu Phe Ser Ala Ile Arg  
 35 40 45  
 Ala Ser Gln Arg Pro Met Thr Gly Leu Lys Gly Ile Arg Ala Asp Asp  
 50 55 60  
 Leu His Phe Arg Gly Phe Ser Ser Glu Asp Leu Thr Asp Gly Gly Ala  
 65 70 75 80  
 Ala Thr Ala Glu His Gln Thr Ser Pro Thr Leu Thr Ser Pro Pro Val  
 85 90 95  
 Ser Pro Gly Val Ser Ser Ser Val Ser Pro Lys Gln His Asp His Arg  
 100 105 110  
 Ala Arg Arg Glu Ser Arg Val Phe Glu Asn Phe Ser Arg Pro Val Pro  
 115 120 125  
 Arg Tyr Pro Arg Ala Gly Ser Thr Thr Pro Pro Pro Arg Thr Ile Ser  
 130 135 140  
 Pro Gln Leu Thr Ala Ser Pro Asp Leu Ser Glu Pro Ala Pro Arg Ala  
 145 150 155 160  
 Ile Asp Glu Ile Leu Gly Leu Ser Ser Gln Pro Thr Tyr Pro Glu His  
 165 170 175  
 Val Tyr Gly Asn Thr Asp Asp Val Glu Gln Tyr Ser Ser Met Pro Gln  
 180 185 190  
 Phe Arg Val Glu Gly Ile Phe Ser Phe Gln Pro Glu His Ala Val Thr  
 195 200 205  
 Thr Asp Ala Ser Thr Glu Arg Ile Asp Ala Glu Ser Ser Val Ser Leu  
 210 215 220  
 Pro Ser Leu Lys Ser Val Leu Lys Glu Val Pro Glu Glu Glu Gly Ile  
 225 230 235 240  
 Thr Ser Trp His Asp Ser Pro Glu Ala Asn Ala Asp Thr Ala Ser Ser  
 245 250 255  
 Pro Ser Ser Ser Gln Ile Asp Pro Ser Ala Lys Val Pro Ile Ser Ser  
 260 265 270  
 Val Gln His Arg Lys Ser Arg Leu Ser Ile Cys Val Ala Glu Glu Leu  
 275 280 285  
 Ser Arg Lys Phe Ser Ala Ala Leu Gly Ser Pro Thr Leu Pro Gln Tyr  
 290 295 300  
 Arg Leu Phe Gln Asp Ala Ala Asp Gln Ala Val Gly Gly Pro Ile Arg  
 305 310 315 320  
 Arg Arg Ser Ser Ala His Arg Lys Pro Ala Tyr Glu Thr Ile Tyr Glu  
 325 330 335  
 Ser Trp Asp Ala Asp Ile Asp Tyr Cys Tyr Glu His Ala Ala Glu Ser  
 340 345 350  
 Thr Phe Asp Phe Asp Trp Ser Gly Asn Ser Leu Asp Glu Ala Arg Pro

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      355              360              365
Ala Asp Asn Asp Asp Asp Ser Arg Ala Ala Cys Gly Gly Pro Ala Asn
      370              375              380
Glu Ser Lys Asp Val Glu Leu Leu Arg Pro Thr Gln Leu Asn Met Pro
385              390              395              400
Arg Leu Pro Ser Pro Glu Leu Asp Pro Ser Gln Ala Arg Ser Ser Leu
      405              410              415
Ser Ser Gln Val Ala Val Thr Pro Ser Ser Ala Glu Tyr Glu Ser Glu
      420              425              430
Ile Val Ser Thr Gly Gly Asp Tyr Phe Gln Pro Val Asn Ser Ser Ile
      435              440              445
Phe Pro Ser Ala Ile Gly Lys Gln Met Thr His Asp Thr Leu Tyr Glu
      450              455              460
Glu Tyr Leu Ala Ala Asp Ala Glu Ser Asp Arg His Phe Ser Phe Cys
465              470              475              480
Ser Gln Gly Val Ile His Ala Met Asp His Pro Val Ser Pro Arg Ser
      485              490              495
Ser Phe Ser Pro Ile Ser Lys Cys Asn Ser Gln Glu Ser Leu Ile Leu
      500              505              510
Ser Arg Ala Ala Ser Ile Val Arg Lys His Arg Ser Ser Val Ser Thr
      515              520              525
Ala Ser Val Pro Glu Leu Val His Ser Leu Ala Ser Ser Arg Glu Leu
      530              535              540
Pro Ser Met Glu His Leu Pro Ser Met Glu Gln Ser Ser His Thr Ala
545              550              555              560
Pro Ser Leu Ala Gly Arg Thr Glu Val Pro Cys Tyr His Arg Gln Thr
      565              570              575
Arg Ser Leu Ala Arg Glu Ile Glu Thr Gln Ile Met Ser Arg Ser Glu
      580              585              590
Asn Asn Pro Ser Pro Gly Pro Ala Asp Pro Ala Arg Ala Ser Gly Met
      595              600              605
Val His Asp Arg Ala Lys Ser Thr Ser Glu Val Asp Val Pro Arg Thr
      610              615              620
Val Arg Thr Thr Arg Arg Asn Ala Ser Ala Pro Leu Pro Pro Val Pro
625              630              635              640
Leu Lys Ser Pro Asn Arg Arg Lys Gly Arg Thr Ser Tyr Ser Leu Phe
      645              650              655
Pro Thr Pro Ala Ala Asn
      660

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&lt;210&gt; 42884

&lt;211&gt; 446

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42884

```

Gly Gly Tyr Arg Pro Ser Glu Pro Ser Trp Leu Met Gln Leu Ser Met
1              5              10              15
Arg Thr Asp Phe Ser Ser Met His Tyr Leu Ser Val Ala Tyr Phe Gly
      20              25              30
Ala Leu Ile Leu Leu Tyr Gly Pro Ile Phe Leu Val Lys Pro Cys Leu
      35              40              45
Ala Leu Asp Pro Pro Ser Asp Ser Ala Leu Leu Ile Phe Ser Asn Asp
      50              55              60
Thr Asn Val Ile Leu His Asp Val Thr Gly Gln Phe Thr Ser Leu His
65              70              75              80

```

## 19295

Gly Ser Tyr Ser Gly Leu Asp Val Gln Asp Thr Gly Ser Glu Asn Gly  
                   85                  90                  95  
 Glu Thr Arg Gly Leu Asp Leu Val Arg Arg Val Pro Pro Gly Val Ser  
                   100                  105                  110  
 Ser Leu Gly Asn Asn Gln Phe Lys Thr Ser Gly Ile Lys Leu Gly Glu  
                   115                  120                  125  
 Thr Gln Trp Trp Tyr Phe Pro Lys Glu Ser Val Asn Gly Lys Lys Ser  
                   130                  135                  140  
 Asn Val Thr Ser Gly Leu Pro Glu Arg Ile Ser Val Asp Arg Thr Ser  
                   145                  150                  155                  160  
 Gln Gln Thr Val Arg Ser Asp Glu Leu Arg Lys Arg Asp Gly Asp Thr  
                   165                  170                  175  
 Val Lys Arg Ser Thr Ser Val Tyr Leu Ser Leu Thr Met Cys Ser Lys  
                   180                  185                  190  
 Pro Asp Ile Asn Ile Thr Asn Gly Thr Ile Pro Asp Ser Val Pro Ser  
                   195                  200                  205  
 Leu Pro Glu Leu Asn Leu Tyr Val Ser Thr Ser Glu Ser Leu Gln Lys  
                   210                  215                  220  
 Pro Gly Pro Gly Gln Asp Ser Ser Lys Gln Glu Val Phe Thr Ala Asp  
                   225                  230                  235                  240  
 Glu Gly Tyr Val Gly Ala Ser Val Gln Ala Asp Gly Asp Val Phe Ile  
                   245                  250                  255  
 Gly Val Ala Val Gln Asn Ser Thr Ala Tyr Ser Gly Gly Tyr Thr Tyr  
                   260                  265                  270  
 Glu Ile Ala Ala Ser Ile Asp Ala Tyr Phe His Ser Val Val Asp Glu  
                   275                  280                  285  
 Pro Phe Leu His Phe Val Asp Ala Asp Ile His Ala Ala Leu Leu Thr  
                   290                  295                  300  
 Thr Asp Asn Leu Thr Leu Ser Glu Glu Gly Ser Glu Asn Tyr Gln Gln  
                   305                  310                  315                  320  
 Trp Met Asn Leu Thr Pro Pro Phe Thr Met Phe Ala His Asn Val Asn  
                   325                  330                  335  
 Asp Thr Ala Ile Ser Gly Leu Gln Arg Ser Tyr Cys Ala Leu Glu Gln  
                   340                  345                  350  
 Leu Ala Gln Leu Arg Glu Gly Asp His Gly Val Glu Gly Gly Met Thr  
                   355                  360                  365  
 Asn Arg Gly Leu Gly Lys Lys Pro Lys Glu Gln Phe Tyr Ile Thr Gly  
                   370                  375                  380  
 Leu Asn Arg Thr Ser Asn Tyr Ser Gly Ile Leu Ala Met Asp Gly Asn  
                   385                  390                  395                  400  
 Ser Thr Asn Ser Gly Asn Gly Ile Val Gly Gly Gly Gly Thr Val Trp  
                   405                  410                  415  
 Lys Pro Met Tyr Phe Ala Thr Lys Ser Gly Glu Gln Val Thr Ser Leu  
                   420                  425                  430  
 Cys Ser Ser Leu Lys Arg Ser Lys Val Leu Thr Trp Asn Arg  
                   435                  440                  445

&lt;210&gt; 42885

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42885

Pro Gly Thr Asp Asp Asn Cys Ala Val Leu Phe Asn Leu Thr Phe Cys  
 1                  5                  10                  15  
 Ser Glu Val Ala Tyr Ala Val Pro Ser Asn Pro Glu Phe Gly Ile Ala

## 19296

20 25 30  
 Gln Leu Gly Ala Lys Tyr Asp Lys Tyr Ala Glu Ala Leu Tyr Arg Asn  
 35 40 45  
 Phe Ser Tyr Ser Leu Asp Gln Ile Gln Cys Asn Thr Thr Asn Glu Thr  
 50 55 60  
 Ser Phe Ser Leu Ala Val Ser Cys Asn Asp Cys Ala Asp Ala Tyr Lys  
 65 70 75 80  
 Gln Trp Leu Cys Ala Val Thr Ile Pro Arg Cys Ala Asp Phe Ser Ser  
 85 90 95  
 Asn Ser Val Phe Leu Gln Val Arg Asn Ala Gly Gln Gln Phe Ile Asn  
 100 105 110  
 Gly Ser Ser Leu Ser Pro Thr Asp Pro Arg Arg Arg Asp Pro Ala Gln  
 115 120 125  
 Asn Lys Ser Arg Asn Ser Met Ile Asp Asp Gln Ile Arg Pro Gly Pro  
 130 135 140  
 Tyr Lys Glu Ile Leu Pro Cys Gln Asp Ile Cys Tyr Ser Leu Val Lys  
 145 150 155 160  
 Arg Cys Pro Ala Ala Leu Gly Phe Ser Cys Pro Gln Gly Ala Arg Leu  
 165 170 175  
 Ser Ser Ala Tyr Gly Gln Arg Gly Ser Ser Ser Glu Ile Thr Cys Ser  
 180 185 190  
 Tyr Pro Gly Ala Ala Tyr Asp Leu Asn Ala Gly Arg Ala Arg Arg Glu  
 195 200 205  
 Pro Leu Gly Trp Leu Leu Leu Ala Met Gly Ser Phe Trp Phe Ser Phe  
 210 215 220  
 Trp Ala Leu Arg Val Asp Ala  
 225 230

&lt;210&gt; 42886

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42886

Ser Asn Asp Asn Arg Met Leu Ile Val Ser Asp Arg Met Val Ser Leu  
 1 5 10 15  
 Phe Val Arg Leu Pro Ala Phe Pro Ser Phe Leu Leu Pro Glu Phe Leu  
 20 25 30  
 Ser Ala Phe Leu Ser Lys Asn Ser Gly Arg Leu Ser Gly Ser Glu Ser  
 35 40 45  
 Trp Arg Leu Ile Arg Pro Pro Lys Trp Arg Gln Ala Asp Asp Asp Val  
 50 55 60  
 Thr Leu Phe Arg Leu Met Val Tyr Gln Leu Gln Leu Phe Leu Phe Asp  
 65 70 75 80  
 Thr Phe Lys Arg Gln Gln Leu Phe Cys Thr Glu Gln Ser Glu Gly Leu  
 85 90 95  
 Asn Ser Ile Val Asp Asn Ile  
 100

&lt;210&gt; 42887

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42887

Lys Thr Ile Thr Pro Arg Arg Gln Thr Asn His Gly Thr Lys Glu Glu



## 19297

```

1           5           10           15
Ala Ala Ser Val Ser Thr Glu Trp Asp Ala Cys Ile Lys Gly Pro Lys
           20           25           30
Ala Gly Leu Ser Pro Thr Pro Tyr Thr Ser Arg Arg Leu Glu Met Tyr
           35           40           45
Val Lys Ser Gln Ser Ser Leu Gln Gly Tyr Asp Thr Val Asn Gln Val
           50           55           60
Pro Ile
65

```

&lt;210&gt; 42888

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42888

```

Asn Leu Ala Ala Glu Ile Gly Gly Tyr Phe Glu Pro Leu Lys His
1           5           10           15
Asp Phe Ile Thr Lys Ser Ser Tyr Ser Cys Ala Ala Asp Ile Ala Ile
           20           25           30
Ala Tyr Gly Leu Glu Tyr Gly Ser His Cys Ser Val Gly Val Pro Val
           35           40           45
Glu Gly Val Val Leu Tyr Leu Leu Pro Ala Leu Glu Gly
           50           55           60

```

&lt;210&gt; 42889

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42889

```

Pro Trp Gln Val Val Trp Leu Ser Ser Met Phe Tyr Leu Ala Cys Leu
1           5           10           15
Gly Phe Ile Lys Thr Ser Val Cys Trp Phe Tyr Thr Arg Ile Gly Asp
           20           25           30
Lys Thr Leu Thr Arg Met Ser Leu Ile Met Met Gly Ile Val Gly Thr
           35           40           45
Gln Ala Thr Val Phe Val Met Val Ala Ala Phe Gln Cys Arg Pro Ile
           50           55           60
Pro Lys Ala Trp Asn Thr Ser Leu Pro Gly Gln Cys Val Glu Ile Asn
65           70           75           80
Ile Phe Tyr Leu Ala Asn Ala Ala Leu Asn Ile Leu Thr Asp Leu Leu
           85           90           95
Thr Tyr Ser Leu Pro Ile Lys Val Leu Leu Arg Leu Gln Met Pro Val
           100          105          110
Lys Gln Lys Leu Ala Leu Gly Phe Ile Leu Cys Leu Gly Leu Leu
           115          120          125

```

&lt;210&gt; 42890

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42890

```

Val Thr Arg Ser Pro Arg Arg Ile Gly Thr Leu Thr Arg Leu Pro Ser
1           5           10           15

```

## 19298

Ala Cys Ile Ser Ser Ile Ile Arg Ile Ser Tyr Ile Pro Thr Met Leu  
 20 25 30  
 Lys Ser Ala Asp Phe Thr Tyr Ala Ile Ser Gly Ala Met Tyr Trp Ser  
 35 40 45  
 Val Ile Glu Thr Asn Val Gly Ile Leu Ala Ala Ser Ile Pro Ser Phe  
 50 55 60  
 Lys Ala Ile Ala Ser Arg Phe Leu Pro Arg Leu Ile Gly Glu Tyr Ser  
 65 70 75 80  
 Ser Gly Arg Lys Tyr Gly Ser Ser Thr Leu Thr Gly Ser Lys Pro Ile  
 85 90 95  
 His Trp Gly Phe Ser Arg Phe Lys Asp Ser Val Thr Met Asn Ser Leu  
 100 105 110  
 Arg Thr Lys Asp Ala Glu Val Met Pro Thr Glu Ile Gly Lys Gly Tyr  
 115 120 125  
 Gly Ser Asn Thr Ser Glu Glu Arg Ile Val Val Pro Asn Gly Lys Ile  
 130 135 140  
 Trp Thr Thr Thr Gln Ile Glu Thr Asn Val Glu Ile Thr Asn Thr Ser  
 145 150 155 160  
 Ile Arg

&lt;210&gt; 42891

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42891

Phe Ser Val Ala Phe Ser Ala Ser Phe Leu Ser Thr Pro Pro Trp Pro  
 1 5 10 15  
 Ile Ser Arg Ile Ile Tyr Ser Val Arg Thr Phe Ser Leu Gly Val Ile  
 20 25 30  
 Pro Tyr Met Ala Ile Ile Ile Arg Thr Val Tyr Ser Ile Leu His Ile  
 35 40 45  
 Ile Arg Thr Ser Glu Asp Glu Thr Asp His Gln Phe Ala Gly Thr Val  
 50 55 60  
 Ser Leu Asn Ser Gly Asn Gly Gln Lys Asn Arg Ser Gln Ser Leu Ser  
 65 70 75 80  
 Val Arg

&lt;210&gt; 42892

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42892

Arg Cys Ala Arg Ile Gln Val Ser Ala Thr Ala Ala Glu Ser Pro Cys  
 1 5 10 15  
 Pro Leu Ser Ala Ser Thr Ser Asp Gln Gly Lys Arg Asn His His  
 20 25 30  
 Thr Glu Gln Met Ser Thr Ala Ser Ile Gly Val Ile Val Gly Ser Gln  
 35 40 45  
 Arg Val Pro Arg Ser Gly Leu Gln Ile Thr Gln Phe Val Leu Lys Thr  
 50 55 60  
 Ile Gln Lys Ala Tyr Pro Thr Ala Asn Leu Arg Leu Ile Asp Leu Ala  
 65 70 75 80

## 19299

Thr Trp Asn Leu Pro Leu Tyr Asn Glu Pro Gly Ile Pro Ser Phe Leu  
                   85                  90                  95  
 Asn Ser Pro Glu Glu Tyr Thr His Glu Leu Thr Arg Lys Trp Ser Glu  
                   100                  105                  110  
 Glu Ile Ala Ser His Ala Ala Phe Ile Phe Val Thr Pro Gln Tyr Asn  
                   115                  120                  125  
 Trp Gly Tyr Pro Ala Ser Ile Lys Asn Ala Ile Asp Tyr Leu Tyr His  
                   130                  135                  140  
 Glu Trp Lys Gly Lys Pro Gly Met Ile Val Ser Tyr Gly Gly Arg Gly  
 145                  150                  155                  160  
 Gly Gly Lys Ala Ala Gln Gln Leu His Gln Val Leu Gln Gly Leu Gly  
                   165                  170                  175  
 Met Gln Pro Val Glu Pro Ser Cys Arg Phe Asp Val Ser Tyr Ala Gly  
                   180                  185                  190  
 Val Tyr Gly Glu Ser Asp Gln Gly Arg Gly Ser Gly Ser Ala Gly Gly  
                   195                  200                  205

&lt;210&gt; 42893

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42893

Val Val Gln Arg Arg His Gln Pro Ala Leu Ile Ser Pro Arg Ile Arg  
 1                  5                  10                  15  
 His Val Lys Cys Asp Glu Gln Gln Pro Glu Cys Leu Gln Cys Val Lys  
                   20                  25                  30  
 Thr Gly Arg Lys Cys Asp Gly Tyr Asp Pro Gln Gln Thr Asn Pro Gln  
                   35                  40                  45  
 Ala Gln Gln Arg Ala Val Leu Asp Pro Ala Pro Val Ala Trp Thr Lys  
                   50                  55                  60  
 Pro Ser Thr Asp His Arg Leu Val Leu Arg Pro Gly Thr Arg Gly Glu  
 65                  70                  75                  80  
 Arg Gln Tyr Ile Glu Phe Phe Cys Thr Arg Thr Ser Arg Ala Leu Ser  
                   85                  90                  95  
 Gly Phe Phe Asp Ser Asp Leu Trp Gln  
                   100                  105

&lt;210&gt; 42894

&lt;211&gt; 583

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42894

Ala Ser Gly Ser Arg Asn Arg Ala Asp His Gln Thr Arg Phe Asp Phe  
 1                  5                  10                  15  
 Tyr Phe Lys Ser Cys Ser Ala Gln Pro Ala Thr Met Pro Pro Lys Ala  
                   20                  25                  30  
 Arg Ile Asn Ser Lys Asn Ser Val Glu Gln Glu Gly Arg Val Leu Leu  
                   35                  40                  45  
 Ala Val Ser Ala Leu Lys Asn Lys Glu Ile Leu Asn Ile Arg Glu Ala  
                   50                  55                  60  
 Ala Arg Val Tyr Asn Val Pro Tyr Thr Thr Leu Gln Arg Arg Leu Lys  
 65                  70                  75                  80  
 Gly His Thr Phe Arg Ala Glu Leu Arg Ala Asn Gly His Lys Met Thr  
                   85                  90                  95

## 19300

Gln Asn Glu Glu Asp Ser Leu Ile Arg Trp Ile Leu Ser Met Asp Gln  
 100 105 110  
 Arg Gly Ala Ala Pro Arg Pro Ser His Val Arg Glu Met Ala Asn Ile  
 115 120 125  
 Leu Leu Ala Gln Arg Gly Ser Thr Pro Thr Gln Thr Val Gly Glu Lys  
 130 135 140  
 Trp Val Tyr Asn Phe Ile Asn Arg His Asp Glu Ile Lys Thr Arg Phe  
 145 150 155 160  
 Ser Arg Arg Tyr Asn His Gln Arg Ala Lys Cys Glu Asp Pro Lys Ile  
 165 170 175  
 Ile Leu Glu Trp Phe Asn Arg Val Gln Ile Thr Ile Met Gln His Gly  
 180 185 190  
 Ile Thr Leu Glu Asp Ile Tyr Asn Phe Asp Glu Thr Gly Phe Ala Met  
 195 200 205  
 Gly Leu Val Ala Thr Ala Lys Val Val Thr Arg Ala Glu Met Leu Ser  
 210 215 220  
 Arg Pro Phe Leu Ile Gln Pro Gly Asn Arg Glu Trp Val Thr Ser Ile  
 225 230 235 240  
 Glu Cys Ile Asn Ser Thr Gly Trp Val Leu Pro Pro Cys Ile Ile Phe  
 245 250 255  
 Lys Gly Lys Val His Ile Glu Gly Trp Tyr Gln Asp Thr Ala Leu Pro  
 260 265 270  
 Ala Asp Trp Arg Ile Glu Val Ser Glu Asn Gly Trp Thr Thr Asp Gln  
 275 280 285  
 Ile Gly Leu Arg Trp Leu Gln Lys Val Phe Ile Pro Ala Thr Thr Ser  
 290 295 300  
 Arg Thr Thr Gly Arg Tyr Arg Leu Leu Ile Leu Asp Gly His Gly Ser  
 305 310 315 320  
 His Leu Thr Pro Gln Phe Asp Gln Ile Cys Thr Glu Asn Asp Ile Ile  
 325 330 335  
 Pro Ile Cys Met Pro Ala His Ser Ser His Leu Leu Gln Pro Leu Asp  
 340 345 350  
 Val Gly Cys Phe Ser Pro Leu Lys Arg Ala Tyr Gly Arg Leu Ile Glu  
 355 360 365  
 Asp Lys Met Arg Leu Gly Phe Asn His Ile Asp Lys Phe Asp Phe Leu  
 370 375 380  
 Glu Ala Tyr Pro Gln Ala Arg Thr Ala Ile Phe Ser Ala Asp Asn Ile  
 385 390 395 400  
 Lys Ser Gly Phe Ser Ala Thr Gly Leu Ile Pro Leu Asn Pro Asp Arg  
 405 410 415  
 Val Leu Ser Gln Leu Asn Ile Gln Leu Arg Thr Pro Thr Pro Pro Gly  
 420 425 430  
 Ser Arg Ser Thr Asn Ser Val Pro Lys Thr Pro Tyr Asn Leu Lys Gln  
 435 440 445  
 Leu Lys Lys Gln Glu Thr Thr Leu Lys Lys Leu Leu Arg Glu Arg Thr  
 450 455 460  
 Tyr Ser Pro Pro Thr Pro Thr Lys Ala Val Leu Gly Gln Ile Ile Lys  
 465 470 475 480  
 Gly Cys Glu Met Ala Met Asn Asn Ala Ala Leu Leu Ala Lys Glu Asn  
 485 490 495  
 His Asp Leu Arg Ala Ala His Glu Lys His Leu Gln Lys Gln Lys Arg  
 500 505 510  
 Ser Arg Arg Gln Ile Glu Thr Ala Val Gly Leu Ser Ile Gln Glu Gly  
 515 520 525  
 Gln Glu Ile Ile Gln Arg Arg Asp Gln Ala Ala Glu Ala Ile Pro Thr  
 530 535 540

## 19301

Ile Pro Pro Glu Gln Val Val Asp Thr Glu Gln Arg Pro Gln Arg Ala  
 545 550 555 560  
 Pro Pro Arg Cys Ser Asp Cys His Ile Leu Gly His Arg Arg Leu Gln  
 565 570 575  
 Cys Pro Gln Arg Lys Asn Asn  
 580

&lt;210&gt; 42895

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42895

Ile Ser Gln Leu Ser Ser Ser Pro His Ser Ser Ser Ser Arg Lys Pro  
 1 5 10 15  
 Pro Ser Ser Gln Ile Ser Leu Val Gln Cys Pro His Tyr Asn Ser Gln  
 20 25 30  
 Ser His Asn Gln Lys Met Ser Ser Val Gln Ser Phe Arg Gln Leu Ile  
 35 40 45  
 Gly Val Pro Pro Ser Thr Ala Ser Ala Lys Asp Ser Ser Leu Ile Ile  
 50 55 60  
 Ile Asp Ala Gln Asn Glu Tyr Ala Thr Gly His Leu Lys Thr Ala Asn  
 65 70 75 80  
 Val Ser Gln Thr Arg Lys Ala Ile Ala Ala Leu Leu Glu Lys Tyr Arg  
 85 90 95  
 Ala Gly Gly Asp Gly Lys Asn Ile Val His Ile Val His Glu Val Pro  
 100 105 110  
 Gln Gly Ala Pro Val Phe Thr Pro Asp Thr Asp Leu Ala Lys Glu Phe  
 115 120 125  
 Asp Glu Leu Thr Pro Arg Gly Gly Glu Lys Val Ile Thr Lys His Phe  
 130 135 140  
 Pro Ser Ala Phe Ala Gln Thr Asp Leu Asp Glu Tyr Leu Thr Gly Leu  
 145 150 155 160  
 Gly Asp Ala Gly Lys Lys Val Val Leu Val Gly Tyr Met Ala His Val  
 165 170 175  
 Cys Val Ser Thr Thr Ala Arg Ala Ala Ser Glu Arg Gly Tyr Asp Val  
 180 185 190  
 Val Ile Ala Ser Asp Ala Val Gly Asp Arg Ala Ile Pro Gly Ala Ser  
 195 200 205  
 Ala Glu Thr Leu Val Ser Val Val Leu Ser Glu Leu Ala Asp Ala Phe  
 210 215 220  
 Ala Thr Val Leu Pro Ser Ser Glu Ile Thr Ala  
 225 230 235

&lt;210&gt; 42896

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42896

Pro Ala Leu Asp Glu Pro Ser Pro Ala Gln Glu Gln Ser Asn Pro Thr  
 1 5 10 15  
 Ala Arg Trp Ala Asp Thr Ser Thr Gly Ile Ser Asn Ser Ser Thr Glu  
 20 25 30  
 Ser Ser Ser Ser Asn Gly Ser Asn Asn Ala Pro Thr His Ser Glu Pro  
 35 40 45

## 19302

Glu Arg Ser Val Pro Glu Gln Arg Ser Gln Thr Met Pro Gly Gly Asp  
 50 55 60  
 Ser Ser Ser Gln Gln Lys Glu Asp Gly Gly Val Glu Arg Ala Pro Pro  
 65 70 75 80  
 Thr Thr Thr Gln Gln Val Ser Ala Glu Ala Leu Lys Gly Pro Gln Gly  
 85 90 95  
 Pro Ala Pro Arg Glu Ala Tyr Glu Phe Glu Lys Glu Ile Asp Gly Gln  
 100 105 110  
 Pro Ser Lys Thr Lys Thr Gly  
 115

&lt;210&gt; 42897

&lt;211&gt; 335

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42897

Pro Ala Thr Tyr Arg Lys Tyr Asp Arg Pro Ser Tyr Thr Leu Ser Thr  
 1 5 10 15  
 Phe Ile Pro Arg Lys Ser Gln Thr Phe Tyr Leu Ala Leu Arg Ala Leu  
 20 25 30  
 Asn Val Thr Leu Ser Met Ile Pro Glu Thr Thr Ser Ser Tyr Thr Ile  
 35 40 45  
 Gly Leu Met Arg Leu Gln Phe Trp Arg Asp Ala Ile Thr Lys Ile Phe  
 50 55 60  
 Ala Gly Ser Pro Pro Lys Glu Pro Ile Ala Ile Leu Leu Ala Ser Ala  
 65 70 75 80  
 Ile Thr Asn Leu Asn Glu Arg Thr Gln Gly Gln Ala Arg Ile Ser Arg  
 85 90 95  
 Ala Trp Leu Asn Lys Met Ile Asn Ala Arg Glu Gln Thr Leu Thr Asn  
 100 105 110  
 Asp Pro Tyr Pro Thr Ile Ala Ala Leu Glu Thr Tyr Ala Glu Asn Thr  
 115 120 125  
 Tyr Ser Thr Leu Leu Tyr Leu Thr Leu Ser Ser Leu Pro Met Thr Ser  
 130 135 140  
 Ile Thr Ala Asp His Val Ala Ser His Ile Gly Lys Ala Ala Gly Ile  
 145 150 155 160  
 Ala Ala Val Leu Arg Gly Leu Pro Leu Val Ala Phe Pro Pro Pro Gln  
 165 170 175  
 Ala Gln Ser Pro Thr Gln Pro Ala Ser Gly Asn Phe Gly Gly Asn Lys  
 180 185 190  
 Gln Gly Ala Val Met Leu Pro Leu Asp Val Met Ala Gln Ala Gly Val  
 195 200 205  
 Lys Glu Glu Asp Val Phe Arg Met Gly Gly Asp Ala Pro Gly Leu Arg  
 210 215 220  
 Asp Ala Val Phe Thr Val Ala Thr Arg Ala Ser Asp His Leu Ile Thr  
 225 230 235 240  
 Val Gln Gln Met Leu Ser Asn Leu Arg Ala Gly Gln Asp Val Gly His  
 245 250 255  
 Asp Phe Glu His Ala Asp Glu Glu Gly His Glu Tyr Leu Ala Asn Arg  
 260 265 270  
 Asp Gln Arg Asp Glu Ser Pro Leu Asp Glu Val Asn Arg Ala Phe Gly  
 275 280 285  
 Val Phe Met Pro Ala Val Ser Thr Arg Leu Trp Leu Asp Arg Leu Glu  
 290 295 300  
 Lys Val Asp Phe Asp Ile Phe Arg Pro Glu Leu Leu Arg Ser Asp Trp

| Variable             | Mean  | Standard deviation | Minimum | Maximum | Skewness | Kurtosis | Jarque-Bera | Probability |
|----------------------|-------|--------------------|---------|---------|----------|----------|-------------|-------------|
| Age                  | 38.22 | 10.12              | 22      | 65      | -0.03    | 3.00     | 0.99        | 0.61        |
| Gender               | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Married              | 0.72  | 0.45               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Children             | 1.22  | 1.12               | 0       | 5       | -0.01    | 3.00     | 0.99        | 0.62        |
| Religion             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Education            | 12.22 | 2.12               | 8       | 16      | -0.01    | 3.00     | 0.99        | 0.62        |
| Income               | 12.22 | 2.12               | 8       | 16      | -0.01    | 3.00     | 0.99        | 0.62        |
| Health               | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Smoking              | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Alcohol              | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Exercise             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Stress               | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Sleep                | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Appetite             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Mood                 | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Energy               | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Concentration        | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Memory               | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Emotion              | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Behavior             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Thought              | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Feeling              | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Perception           | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Attention            | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Intuition            | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Imagination          | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Reasoning            | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Logic                | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Analysis             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Synthesis            | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Evaluation           | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Comparison           | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Classification       | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Organization         | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Planning             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Problem Solving      | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Decision Making      | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Communication        | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Interpersonal Skills | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Teamwork             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Leadership           | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Management           | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Organization         | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Planning             | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Problem Solving      | 0.48  | 0.50               | 0       | 1       | -0.01    | 3.00     | 0.99        | 0.62        |
| Decision Making      |       |                    |         |         |          |          |             |             |

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<210> 42898
<211> 1083
<212> PRT
<213> A.fumigatus
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|         |       |         |         |        |        |        |         |     |        |     |         |         |     |        |         |  |
|---------|-------|---------|---------|--------|--------|--------|---------|-----|--------|-----|---------|---------|-----|--------|---------|--|
| <400>   | 42898 |         |         |        |        |        |         |     |        |     |         |         |     |        |         |  |
| His 1   | Thr   | Cys     | Thr     | Asn 5  | Arg    | Ala    | Val     | Pro | Ala 10 | Leu | Pro     | Arg     | Phe | Asn 15 | Glu     |  |
| Ile     | Gly   | Val     | Gln 20  | Gln    | Leu    | Ser    | Asp 25  | His | Val    | Tyr | Ser     | Gln 30  | Val | Phe    | Pro     |  |
| Asn     | Gln   | Ala 35  | Arg     | Ser    | Pro    | Asp 40 | Pro     | Val | Leu    | Val | Ala 45  | Leu     | Ser | Lys    | Glu     |  |
| His 50  | Leu   | Ser     | Arg     | His    | Asp 55 | Leu    | Leu     | Gly | Lys    | Ser | Gln 60  | Asp     | Ala | Ala    | Glu     |  |
| Pro 65  | Ile   | Ala     | Phe     | Asp 70 | Met    | Pro    | Ala     | Leu | Gln 75 | Gly | Gln     | Ser     | Met | Asp    | Glu 80  |  |
| His     | Phe   | Phe     | Lys 85  | Leu    | Gly    | Met    | Asp 90  | Ala | Ser    | Glu | Pro     | Tyr     | Leu | Thr 95 | Tyr     |  |
| Ala     | Lys   | Ser     | Tyr 100 | Thr    | Thr    | Val    | Asn 105 | Ser | Pro    | Gln | Lys     | Pro     | Arg | Glu    | Trp     |  |
| Val     | Lys   | Arg     | Ser 115 | Gly    | Trp    | Thr    | Lys 120 | Tyr | Asn    | Ser | Asp     | Gly 125 | Ser | Trp    | Glu     |  |
| Pro 130 | Val   | Asp     | Ala 135 | Pro    | Asn    | Glu    | Pro 140 | Met | Leu    | Thr | Phe 145 | Asp     | Thr | Glu    | Val     |  |
| Met 145 | Tyr   | Lys     | Glu 150 | His    | Ser    | Phe    | Ala 155 | Val | Met    | Ala | Cys 160 | Ala     | Val | Ser    | Pro 165 |  |
| Thr     | Ala   | Trp     | Tyr 165 | Ala    | Trp    | Leu    | Ser 170 | Pro | Trp    | Leu | Leu     | Gly 175 | Glu | Ser    | Glu     |  |
| Asn     | Glu   | Val     | Gln 180 | Leu    | Ile    | Pro    | Leu 185 | Gly | Asp    | Lys | Lys     | Gln 190 | Pro | Arg    | Ile     |  |
| Val     | Val   | Gly 195 | His     | Asn    | Ile    | Gly    | Tyr 200 | Asp | Arg    | Ala | Arg     | Val 205 | Leu | Glu    | Glu     |  |
| Tyr     | Gly   | Met     | Glu 210 | Gln    | Thr    | Arg    | Asn 215 | Phe | Phe    | Leu | Asp 220 | Thr     | Met | Ser    | Leu     |  |
| His 225 | Val   | Ala     | Val 230 | Asn    | Gly    | Met    | Cys 235 | Ser | Gln    | Gln | Arg     | Pro     | Thr | Trp    | Met     |  |
| Arg     | His   | Lys     | Lys 245 | Asn    | Lys    | Asp    | Leu 250 | Arg | Asp    | Lys | Ile     | Ala     | Asn | Glu    | Ser     |  |
| Asn     | Ser   | Val     | Glu 260 | Leu    | Ala    | Ala    | Leu 265 | Leu | Glu    | Ser | Lys     | Met     | Leu | Ser    | Glu     |  |
| Glu     | Glu   | Glu     | Glu 275 | Leu    | Trp    | Val    | Gly 280 | Arg | Ser    | Ser | Val     | Asn     | Ser | Leu    | Arg     |  |
| Asp     | Val   | Ala     | Lys 290 | Phe    | His    | Cys    | Asp 295 | Val | Thr    | Ile | Asp     | Lys     | Ser | Gln    | Arg     |  |
| Asp 305 | His   | Phe     | Gly 310 | Glu    | Leu    | Asn    | Arg 315 | Glu | Gln    | Ile | Leu     | Gly     | Lys | Leu    | Glu     |  |
| Glu     | Leu   | Leu     | Asp 325 | Tyr    | Cys    | Ala    | Ala 330 | Asp | Val    | Ala | Ile     | Thr     | His | Arg    | Val     |  |
| Tyr     | Lys   | Lys     | Val 340 | Phe    | Pro    | Asn    | Phe 345 | Leu | Glu    | Val | Cys     | Pro     | His | Pro    | Val     |  |
| Ser     | Phe   | Gly     | Ala 355 | Leu    | Arg    | His    | Leu 360 | Ser | Ser    | Val | Ile     | Leu     | Pro | Val    | Asn     |  |

## 19304

Glu Thr Trp Lys Glu Tyr Ile Thr Asn Ala Glu Ala Thr Tyr His Gln  
 370 375 380  
 Arg Val Asp Asp Val Gln Arg Arg Leu Val Glu Leu Cys Asn Glu Ala  
 385 390 395 400  
 Leu Lys Val Lys Glu Asn Pro Asp Ile Tyr Met Asn Asp Pro Trp Leu  
 405 410 415  
 Arg Gln Leu Asp Trp Ser Gly Gln Glu Ile Lys Leu Val Lys Gly Lys  
 420 425 430  
 Lys Lys Gly Asp Pro Pro Arg Pro Ala Ala Arg Gln Lys Lys Pro Gly  
 435 440 445  
 Met Pro Gln Trp Tyr Lys Asp Leu Phe Pro Ser Ala Thr Ala Asp Ile  
 450 455 460  
 Asn Leu Thr Val Arg Thr Arg Ile Ala Pro Ile Leu Leu Lys Leu Ser  
 465 470 475 480  
 Trp Asp Gly Tyr Pro Leu Thr Trp Ser Asp Lys Phe Gly Trp Thr Phe  
 485 490 495  
 Lys Val Pro Lys Asp Gln Val Lys Lys Phe Glu Asn Gln Pro Val Val  
 500 505 510  
 Leu Cys Asp Met Ser Glu Glu Lys Asn Leu Glu Leu Arg Asn Asp Arg  
 515 520 525  
 Lys His Val Tyr Phe Lys Leu Pro His Lys Asp Gly Pro Gln Ala Arg  
 530 535 540  
 Cys Val Asn Pro Leu Ala Lys Gly Tyr Leu Gln Phe Phe Glu Arg Gly  
 545 550 555 560  
 Thr Leu Ser Ser Gln Tyr Ala Leu Ala Lys Glu Ala Leu Glu Met Asn  
 565 570 575  
 Ala Ser Cys Ser Tyr Trp Ile Ser Ala Arg Asp Arg Ile Met Ser Gln  
 580 585 590  
 Met Val Val Tyr Glu Asp Gln Val Lys Gln Ser Gly Ser Thr Gly Glu  
 595 600 605  
 Lys Ser Asn Arg Leu Gly Phe Ile Leu Pro Gln Ile Ile Pro Met Gly  
 610 615 620  
 Thr Ile Thr Arg Arg Ala Val Glu Asn Thr Trp Leu Thr Ala Ser Asn  
 625 630 635 640  
 Ala Lys Ala Asn Arg Val Gly Ser Glu Leu Lys Ala Met Ile Lys Ala  
 645 650 655  
 Pro Pro Gly Tyr Val Phe Val Gly Ala Asp Val Asp Ser Gln Glu Leu  
 660 665 670  
 Trp Ile Ala Ser Leu Val Gly Asp Ala Gln Phe Gln Leu His Gly Gly  
 675 680 685  
 Asn Ala Ile Gly Phe Met Thr Leu Glu Gly Ser Lys Ala Ala Gly Thr  
 690 695 700  
 Asp Met His Ser Arg Thr Ala Gln Ile Leu Gly Ile Ser Arg Asn Asp  
 705 710 715 720  
 Ala Lys Val Phe Asn Tyr Gly Arg Ile Tyr Gly Ala Gly Val Lys Phe  
 725 730 735  
 Ala Ala Thr Leu Leu Arg Gln Phe Asn Pro Ser Met Ser Glu Lys Glu  
 740 745 750  
 Thr Gln Glu Val Ala Thr Asn Leu Tyr Arg Glu Thr Lys Gly Thr Arg  
 755 760 765  
 Thr Thr Arg Arg Ile Leu Ser Glu Asn Pro Phe Trp Arg Gly Gly Thr  
 770 775 780  
 Glu Ser Phe Val Phe Asn Lys Leu Glu Glu Phe Ala Asp Gln Glu Arg  
 785 790 795 800  
 Pro Arg Thr Pro Val Leu Gly Ala Gly Ile Thr Glu Ala Leu Met Arg  
 805 810 815



## 19305

Arg Phe Ile Asn Lys Gly Ser Phe Met Thr Ser Arg Ile Asn Trp Ala  
 820 825 830  
 Ile Gln Ser Ser Gly Val Asp Tyr Leu His Leu Leu Ile Ile Ser Met  
 835 840 845  
 Asp Tyr Leu Ile Arg Arg Phe Asn Ile Asp Ala Arg Leu Ala Ile Thr  
 850 855 860  
 Val His Asp Glu Ile Arg Tyr Leu Val Lys Glu Glu Asp Lys Tyr Arg  
 865 870 875 880  
 Ala Ala Met Ala Leu Gln Val Ala Asn Val Trp Thr Arg Ala Met Phe  
 885 890 895  
 Ser Gln Gln Val Gly Ile Asp Asp Leu Pro Gln Ser Cys Ala Tyr Phe  
 900 905 910  
 Ser Ala Val Asp Ile Asp His Val Leu Arg Lys Glu Val Asp Met Asp  
 915 920 925  
 Cys Val Thr Pro Ser His Pro His Lys Ile Pro His Gly Glu Ser Leu  
 930 935 940  
 Asp Ile Ser Gln Leu Leu Asp Lys Asp Gln Glu Ala Tyr Leu Asp Pro  
 945 950 955 960  
 Ser Val Val Pro Val Ser Pro Pro Thr Pro Gln Lys Tyr Thr Tyr Thr  
 965 970 975  
 Pro Arg Glu Ser Val Met Ala Thr Leu Gln Ala Thr Asn Asn Pro Ala  
 980 985 990  
 Phe Ile Lys Ala Gln Ile Thr Lys Asp Asp Lys Glu Leu Arg Glu Ile  
 995 1000 1005  
 Ile Lys Glu Val Thr Lys Thr Lys Ala Ala Thr Ser Ser Thr Ala Arg  
 1010 1015 1020  
 Ser Phe Arg Asn Gly Ser Lys Ser Thr Asn Phe Pro Ala Ala Glu Pro  
 1025 1030 1035 1040  
 Gln Lys Ala Ile Leu Met Asp Ile Asp Ser Gly Leu Tyr Arg Asp Phe  
 1045 1050 1055  
 Arg Tyr Leu Pro Gln Gly Ser Arg His Pro Pro Phe Asn Ile Asn Arg  
 1060 1065 1070  
 Gln Thr Trp Lys Pro Arg Pro Ala Ala Arg Pro  
 1075 1080

&lt;210&gt; 42899

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42899

Gly Gly Thr Leu Ser Asn Lys Phe Lys Asp Gly Leu Gly Lys Asn Val  
 1 5 10 15  
 Phe Glu Leu Ala Ala Asn Gln Pro Thr Arg Ile Asn Leu Ala Ala Ile  
 20 25 30  
 Ile Leu Tyr Ser Phe Asn Gly Ala His Gly Leu Leu Tyr Phe Lys Ile  
 35 40 45  
 Asp Pro Asp Ile Ser Lys Pro Ile Val Trp Asp Val Leu Glu Lys Trp  
 50 55 60  
 Ile Glu Ile Cys His Asn Ala Cys  
 65 70

&lt;210&gt; 42900

&lt;211&gt; 1306

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42900

Gln Phe Glu Ala Ala His Lys Phe Ile Glu Glu Met Thr Ser Ala Arg  
 1 5 10 15  
 Pro Lys Cys Gly Gly Ser Ser Arg Arg Ser Pro Ser Arg Arg Val Ser  
 20 25 30  
 Arg Pro Ser Met Ile Arg Arg Ile Glu Phe Asp Ala Phe Cys Ala Arg  
 35 40 45  
 Ser Leu Thr Phe Pro Cys His Lys Phe Gly His Leu Ile Ser Gly Lys  
 50 55 60  
 Thr Phe Lys Met Val Phe Gly Asp Leu Asn Glu Arg Pro Leu Lys Lys  
 65 70 75 80  
 Arg Arg Phe Phe Val Asp Glu Glu Asp Thr His Pro Pro Ser Ser Glu  
 85 90 95  
 Ala Ala Pro Val Thr Thr Asn Leu Asp Thr Ser Thr Ile Ser Ser Ala  
 100 105 110  
 Gly Pro Glu Gly Ser Asp Val Arg Gln Gln Gln Leu Asn Gly Ala Val  
 115 120 125  
 Pro Phe Pro Asn Val Lys Glu Ser Ser Arg Glu Ser Pro Gly Leu Gly  
 130 135 140  
 Pro Glu Asp Lys Gln Asp Asn Leu Leu Lys Glu Asp Glu Glu Asn Asn  
 145 150 155 160  
 Gly Thr Val Asp Tyr Glu Ile Leu Asn His Ser Pro Ser Ile His Ala  
 165 170 175  
 Gln Gln Asp Gln Arg Val Asp Gln Gly Leu Thr Asn Gly Phe Gly Gly  
 180 185 190  
 Gln Pro Ser Gly Glu Arg Thr Val Ser Glu Thr Gln Ala Phe Gln Ser  
 195 200 205  
 Ser Gly Gly Phe Asp Thr Ser Thr Phe Ala Ser Ile Ile Gly Glu His  
 210 215 220  
 Leu Ser Pro Glu Ser Leu Glu Lys Ile Arg Lys Ala Ser Gly Asp Asp  
 225 230 235 240  
 Leu Glu Arg Ala Val Asn Ile Tyr Phe Asp Gly Ser Trp Lys Ser Ser  
 245 250 255  
 Asn Asn Ser Leu Ser Gln Pro Leu Val Ala Pro His Gln Gln Thr Pro  
 260 265 270  
 Val Asn Glu Ser Ile Ser Gln Thr Val Asn Thr Lys Ile Ser Lys Lys  
 275 280 285  
 Pro Asn Gln Ala Pro Ser Ser Arg Cys Leu Ser Gln Ser Ser Arg Tyr  
 290 295 300  
 Ile Gly Ala Phe Gly Val Gly Ala Trp Ala Thr Arg Ser Gly Val Gly  
 305 310 315 320  
 Leu Leu Lys His Gly Glu His Val Asn Val Glu Arg Ala Arg Ser Gln  
 325 330 335  
 Pro Val Ser Lys Arg Gly Arg Gly Gly Lys Leu Ile Thr Asn Gln Lys  
 340 345 350  
 Gly Asp Val Leu Thr Arg Phe Thr Asn Lys Ser Gly Gln Glu Ile Gly  
 355 360 365  
 Arg Leu Pro Arg Glu Thr Ala Glu Trp Val Ser Thr Leu Ile Asp Gln  
 370 375 380  
 Lys Ile Cys Arg Phe Glu Gly Ile Cys Val Phe Ala Pro Asp Arg Val  
 385 390 395 400  
 Arg Val Asn Asp Thr Ile Tyr Leu Gln Leu Trp Cys Tyr Leu Arg Lys  
 405 410 415  
 Glu Ala Phe Leu Pro Arg Asn Leu Trp Asn Met Gly Asp Asp Asn Arg  
 420 425 430

Ser Thr Ala Phe Phe Glu Glu Gln Glu Ser Ala Glu Glu Lys Gln Leu  
 435 440 445  
 Arg Leu Arg Gln Val Ala Leu Val Lys Leu Phe Asp Glu Ile Gly Leu  
 450 455 460  
 Gln Pro Thr Thr Val Asn Asp Met Thr Lys Lys His Lys Lys Glu Gly  
 465 470 475 480  
 Leu Leu Arg Ala Ala Glu Ile Ala Glu Gln Tyr Asp Lys Thr Lys Arg  
 485 490 495  
 Glu Gly Lys Ser Asn Glu Ser Ser Glu Asp Glu Glu Ser Pro Glu Leu  
 500 505 510  
 Glu Glu Asp Gln Leu Asp Thr Leu Tyr Lys Lys Ala Gln Ser Phe Asp  
 515 520 525  
 Phe Asn Met Pro Glu Ala Gln Pro Pro Pro Ser Phe Val Leu Asn Leu  
 530 535 540  
 Arg Lys Tyr Gln Arg Gln Ala Leu His Trp Met Leu Ala Lys Glu Lys  
 545 550 555 560  
 Asp Lys Lys Ser Gly Arg Glu Leu Ser Met His Pro Leu Trp Glu Glu  
 565 570 575  
 Tyr Thr Trp Pro Thr Lys Asp Val Asp Asp Lys Asp Leu Pro Ala Val  
 580 585 590  
 Glu Gly Gln Ala His Phe Tyr Val Asn Pro Tyr Ser Gly Glu Leu Ser  
 595 600 605  
 Leu Asp Phe Pro Ala Gln Glu Gln His Cys Leu Gly Gly Ile Leu Ala  
 610 615 620  
 Asp Glu Met Gly Leu Gly Lys Thr Ile Glu Met Leu Ser Leu Ile His  
 625 630 635 640  
 Ser His Arg Asn Val Ser Pro Ser Arg Gln Gly Pro Ser Ser Ser Thr  
 645 650 655  
 Glu Leu Val Arg Met Pro Ser Ser Ser Ser Ala Ile Leu Pro Ala Pro  
 660 665 670  
 Asn Thr Thr Leu Val Val Ala Pro Thr Ser Leu Leu Ser Gln Trp Glu  
 675 680 685  
 Ser Glu Ala Met Lys Ala Ser Glu Gln Gly Thr Met Lys Val Leu Met  
 690 695 700  
 Tyr Tyr Gly Val Asp Lys Ser Thr Asn Leu Gln Glu Leu Cys Ser Ala  
 705 710 715 720  
 Gly Asn Pro Ala Ala Pro Asn Ile Ile Ile Thr Ser Tyr Gly Val Val  
 725 730 735  
 Leu Ser Glu Ser Arg Gln Leu Ala Met Phe Asn Ser Asn Thr Gln Gly  
 740 745 750  
 Gly Leu Phe Ser Val Asp Phe Phe Arg Val Ile Leu Asp Glu Ala His  
 755 760 765  
 Val Ile Lys Asn Arg Arg Ser Lys Thr Ala Arg Ala Cys Tyr Glu Leu  
 770 775 780  
 Arg Ala Thr His Arg Trp Val Leu Thr Gly Thr Pro Ile Val Asn Arg  
 785 790 795 800  
 Leu Glu Asp Leu Phe Ser Leu Val Arg Phe Leu Gln Val Glu Pro Trp  
 805 810 815  
 Asn Asn Phe Ser Phe Trp Lys Thr Phe Ile Thr Val Pro Phe Glu Ser  
 820 825 830  
 Lys Asp Tyr Val Arg Ala Leu Asn Val Val Gln Thr Val Leu Glu Pro  
 835 840 845  
 Leu Val Leu Arg Arg Thr Lys Thr Met Lys Thr Pro Glu Gly Glu Pro  
 850 855 860  
 Leu Val Pro Leu Pro Arg Arg Thr Ile Asp Ile Val Glu Val Glu Leu  
 865 870 875 880

## 19308

Ser Glu Gln Glu Arg Glu Ile Tyr Asp Tyr Ile Phe Thr Arg Ala Lys  
 885 890 895  
 Arg Thr Phe Asn Asp Asn Ile Glu Ala Gly Thr Leu Leu Lys Ser Phe  
 900 905 910  
 Ser Thr Ile Phe Ala Gln Ile Leu Arg Leu Arg Gln Thr Cys Cys His  
 915 920 925  
 Pro Ile Leu Thr Arg Asn Lys Thr Ile Val Ala Asp Glu Glu Asp Ala  
 930 935 940  
 Ala Ala Thr Ala Asp Ala Ala Asn Glu Leu Lys Asp Asp Met Asp Leu  
 945 950 955 960  
 Gln Glu Leu Ile Asp Arg Phe Ser Ala Ser Met Glu Asn Ala Asp Thr  
 965 970 975  
 Ala Glu Ala Gln Asp Pro Ser Ala Lys Phe Thr Thr His Ala Leu Arg  
 980 985 990  
 Gln Ile Gln Thr Glu Ser Ser Gly Glu Cys Pro Ile Cys Ser Glu Glu  
 995 1000 1005  
 Pro Met Ile Asp Pro Ala Val Thr Ala Cys Trp His Ser Ala Cys Lys  
 1010 1015 1020  
 Lys Cys Leu Glu Asp Tyr Ile Arg His Gln Thr Asp Lys Gly Val Pro  
 1025 1030 1035 1040  
 Pro Arg Cys Phe Ser Cys Arg Ala Pro Val Thr Ser Arg Asp Ile Phe  
 1045 1050 1055  
 Gln Val Ile Arg His Gln Ser Pro Ser Pro Thr Pro Thr Glu Thr Asp  
 1060 1065 1070  
 Leu Tyr Ser Ser Thr Pro Ala Cys Ser Pro His Pro Ala Pro Arg Ile  
 1075 1080 1085  
 Ser Leu Arg Arg Ile His Pro Leu Ser Pro Ser Ala His Thr Ser Ala  
 1090 1095 1100  
 Lys Ile His Ala Gln Ile Asn His Ile Asn Arg Val His Ala Tyr Thr  
 1105 1110 1115 1120  
 Lys Ser Val Val Phe Ser Gln Phe Thr Ser Phe Leu Asp Leu Ile Gly  
 1125 1130 1135  
 Ala Gln Leu Thr Lys Ala Gly Ile Ser Tyr Val Arg Leu Asp Gly Thr  
 1140 1145 1150  
 Met Pro Gln Lys Ala Arg Ala Glu Val Leu Ala Glu Phe Asn Arg Thr  
 1155 1160 1165  
 Glu Thr Phe His Gln Glu Glu Ile Asp Glu Asp Glu Gly Pro Asp Thr  
 1170 1175 1180  
 Pro Arg Val Arg Ile Ser Ser Lys Asn Ser Arg Ser Ser Pro Lys Ser  
 1185 1190 1195 1200  
 Pro Ala Val Leu Leu Ile Ser Leu Arg Ala Gly Gly Val Gly Leu Asn  
 1205 1210 1215  
 Leu Thr Ala Ala Ser Asn Val Phe Met Met Asp Pro Trp Trp Ser Phe  
 1220 1225 1230  
 Ala Ile Glu Ala Gln Ala Ile Asp Arg Val His Arg Met Gly Gln Leu  
 1235 1240 1245  
 Arg Asp Val Ser Val Thr Arg Phe Ile Val Lys Asp Ser Ile Glu Gly  
 1250 1255 1260  
 Arg Met Leu Arg Val Gln Glu Arg Lys Met Asn Ile Ala Gly Ser Leu  
 1265 1270 1275 1280  
 Gly Leu Arg Val Gly Gly Asp Gly Ser Glu Asp Glu Lys Arg Lys Glu  
 1285 1290 1295  
 Arg Ile Glu Glu Leu Lys Leu Leu Phe Glu  
 1300 1305

&lt;211&gt; 564

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42901

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Ser Phe Val Thr Met Ser Thr His Ser Leu Asp Gln Ala Arg Thr Ile
1      5      10      15
Glu Leu Pro Pro Val Ala Pro Asp Glu Arg Asp Ile Glu Ala Asn Pro
20      25      30
Arg Ala Pro Ile Ala Pro Pro Ser Pro Phe Ser Thr Pro Ala Lys Glu
35      40      45
Val Ala Pro His Ser Pro Glu Thr Phe Thr Ser Ala Ala Arg Ile Ala
50      55      60
Ser His Glu Thr Val Arg His Arg Val Arg Arg Ser Asn Thr Ala Arg
65      70      75      80
Ser Tyr His Pro Asp Ser Val Ala His Glu Pro His Trp Gln Pro Gly
85      90      95
Thr Glu Pro Gly Ile Asp Pro Asn Lys Ser Pro Pro Ala Tyr Ser Ala
100     105     110
Asp Trp Ala Pro His Ile Pro Ala Glu Leu His Arg Lys Cys Glu Ile
115     120     125
Ile Val Val Asp Phe Ser Gln His Glu Met Arg Gln Tyr Glu Leu Asp
130     135     140
Asn Asp Thr Leu Glu Ala Phe Leu Glu Arg Gln Arg Glu Pro Trp Val
145     150     155     160
Gln Cys Arg Trp Ile Asn Val Asn Gly Leu Ser Trp Asp Val Ile Arg
165     170     175
Ile Leu Gly Lys His Lys Gly Leu His Arg Leu Ala Ile Glu Asp Met
180     185     190
Ile Asn Thr Thr Asn Arg Thr Lys Ala Asp Trp Tyr Ser Asp His Ala
195     200     205
Tyr Ile Val Leu Thr Leu Gln Lys Leu Val Lys Leu Arg Glu Glu Ser
210     215     220
Ser Ser Asp Ser Glu Glu Glu Glu Asp Gly Arg Ile Ser Phe Gly
225     230     235     240
Arg Asp Arg Arg Ser Ser Thr Ser Ser Gly Lys Thr His Ser Leu Lys
245     250     255
Arg Pro Thr Lys Arg Ser Leu Val Val Ala Ala Leu Lys Asp Leu Phe
260     265     270
Thr Phe Arg Ser Ala Lys Glu Thr Asp Asp Arg Tyr Ala Asn Gly Ala
275     280     285
Ser Val Arg Pro Ser Ser Gly Arg Ala Ser Ser Lys Ala Gln Ser Asn
290     295     300
Leu Gly Asp Val Val Asn Ala Gly His Thr Ala Arg Ser Ile Gln Arg
305     310     315     320
Phe Arg Gly Gly Pro Asn Glu Asp Arg Ile Ala Phe Met Glu Arg His
325     330     335
Ala Val Leu Ala Ser Lys Gly Leu Ser Val Thr Leu Glu Gln Val Ser
340     345     350
Leu Phe Leu His Ala Asp Asn Thr Val Thr Ser Phe Phe Glu Thr Ser
355     360     365
Ala Asp Asp Ile Glu Ala Pro Ile Val Arg Arg Leu Ser Ser Ser Glu
370     375     380
Thr Ile Leu Arg Gln Ser Cys Asp Ala Ser Met Leu Leu Gln Ala Ile
385     390     395     400
Leu Asp Ala Ile Ile Asp Leu Ala Ile Pro Val Thr Ser Ala Tyr Gln

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## 19310

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                405                410                415
Asp Ala Ile Gly Asp Leu Glu Leu Glu Val Leu Thr Asp Pro Asp Val
                420                425                430
Asp Gln Ser Lys Ser Leu Tyr Ile Leu Thr Ser Glu Ile Ala Val Leu
                435                440                445
Arg Ser Cys Met Gln Pro Ile Val Thr Val Ile Asn Ala Leu Arg Asp
                450                455                460
His Arg Ser Glu Pro Val Ser Thr Pro Gly Phe Gly Leu Lys Gln Leu
465                470                475                480
Gly Thr Thr Thr Pro Leu Ser Met Ser Gly Phe Asn Ser Asp Ala Gln
                485                490                495
Leu Gln Val Gly Val Ala Thr Pro Asn Leu Lys Ser Leu Gly Gly Ser
                500                505                510
Ser Val Ser Ile Ser Asn Met Cys His Thr Tyr Leu Gly Asp Ala Leu
                515                520                525
Asp His Cys Ile Thr Ile Val Glu Thr Tyr Asp Gln Met Arg Arg Ala
                530                535                540
Ala Asp Asn Met Ile Asp Leu Ile Phe Asn Thr Ile Gly Asn Phe Pro
545                550                555                560
Gly Arg Thr Ser

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<210> 42902  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42902
Arg Trp Met Lys Leu Ala Asp Ala Ser Asn Ala Arg His Leu Gly His
1                5                10                15
Leu Thr Asp Glu Phe Gly Met Leu Glu Lys Ala Pro Gln Val Leu Pro
                20                25                30
Ala His Leu Val Ser Ala Ala Val Lys Glu Lys Lys Gly Gly Ser Leu
                35                40                45
Ala Ala Gln Leu Ala Thr Val Leu Ser Ser Leu Val Gln Ala His Asn
                50                55                60
Asp Pro Ile
65

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<210> 42903  
 <211> 658  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (146)  
 <223> Identity of amino acid sequences at the above locations are unknown.

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<400> 42903
Arg Pro Gly Glu Leu Asp Pro Asp Pro Glu Ser Lys Pro Ala Arg Pro
1                5                10                15
Asp Thr Ile Asp Leu Asp Glu Asp Glu Lys Glu Met Leu Ser Glu Ala
                20                25                30
Arg Ala Arg Leu Ala Asn Thr Gln Gly Lys Lys Ala Lys Arg Lys Ala
                35                40                45

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Arg Glu Arg Gln Leu Glu Glu Ser Arg Arg Leu Ala Val Leu Gln Lys  
 50 55 60  
 Arg Arg Glu Leu Lys Asn Ala Gly Ile Asn Ile Lys Val Val Thr Arg  
 65 70 75 80  
 Lys Lys Gly Glu Met Asp Tyr Asn Ala Asp Ile Pro Phe Glu Lys Pro  
 85 90 95  
 Ala Ala Pro Gly Phe Tyr Asp Thr Thr Glu Glu Glu Ala Arg Asn Glu  
 100 105 110  
 Arg Gln Arg Glu Met Phe Asp Pro Arg Lys Gln Gln Leu Ala Asn Lys  
 115 120 125  
 Arg Lys Gly Asp Gln Glu Glu Asp Ala Asp Arg Lys Lys Arg Lys Asn  
 130 135 140  
 Asp Xaa Asn Gly Ser Ser Ala Phe Ala Ala Ala Arg Ala Gly Gln  
 145 150 155 160  
 Met Gln Lys Ile Arg Glu Ala Glu Gln Ser Ser Lys Arg Arg Ala Leu  
 165 170 175  
 Val Leu Pro Ala Pro Gln Val Ser Glu Ser Glu Met Glu Asp Ile Ile  
 180 185 190  
 Lys Met Gly Met Ala Gly Asp Arg Ala Ser Lys Met Ser Gly Asp Asp  
 195 200 205  
 Glu Thr Thr Arg Gly Leu Ile Gly Asn Tyr Thr Ser Ile Val Gly Gly  
 210 215 220  
 Thr Pro Ile Arg Thr Pro Arg Ala Pro Pro Glu Glu Asp His Ile Ala  
 225 230 235 240  
 Asn Glu Ile Arg Asn Ile Arg Ala Leu Thr Glu Thr Gln Ser Ser Leu  
 245 250 255  
 Leu Gly Gly Glu Asn Thr Pro Leu His Glu Gly Gly Ser Ser Thr Gly  
 260 265 270  
 Phe Asp Gly Ile Ala Pro Arg Arg Gln Gln Ile Val Thr Pro Asn Pro  
 275 280 285  
 Met Ala Thr Pro Phe Arg Gln Ala Asn Gly Leu Gly Ala Thr Pro Leu  
 290 295 300  
 His Gly Gly Ile Gly Pro Gly Ala Thr Pro Leu Arg Thr Pro Arg Asp  
 305 310 315 320  
 Gln Phe Ala Leu Asn Gln Met Glu Gly Gly Gln Leu Ile Gly Thr Thr  
 325 330 335  
 Pro Arg Asp Ile Arg Leu His Gln Lys Ala Val Ser Gln Ala Ile Arg  
 340 345 350  
 Ser Lys Leu Ala Ser Leu Pro Lys Pro Lys Glu Thr Glu Trp Glu Leu  
 355 360 365  
 Glu Glu Leu Pro Ser Glu Ser Ala Glu Pro Thr Val Ala Ala Glu Ile  
 370 375 380  
 Ser Glu Lys Asp Ala Ala Glu Arg Asp Arg Arg Glu Arg Glu Ala Arg  
 385 390 395 400  
 Glu Arg Ala Ala Gln Ala Glu Leu Lys Arg Gln Thr Gln Val Tyr Gln  
 405 410 415  
 Arg Gly Leu Pro Arg Pro Ser Val Leu Asp Ile Asp Ala Leu Met Ala  
 420 425 430  
 Arg Ala Ser Gln Val Thr Asp Pro Ile Asn Gly Met Ile Ala Lys Glu  
 435 440 445  
 Ala Ala Leu Leu Ile Ala Asn Asp Ala Gln Lys Phe Arg Leu Pro Asn  
 450 455 460  
 Gly Lys Val Glu Gly Lys Ala Arg Lys Leu Glu Arg Leu Asn Asp Glu  
 465 470 475 480  
 Leu Ile Glu Ala Ala Arg Ala Ala Ile Val Ala Glu Val Ala Ser Ser  
 485 490 495

## 19312

Asn Gln Gln Gln Glu Trp Leu Gln Gly Phe Asp Asp Arg Trp Ser Ser  
                   500                  505                  510  
 Thr His Ser Asn Ala Leu Pro Gly Leu Ala Asn Tyr Gly Asp Asp Asp  
                   515                  520                  525  
 Glu Asp Glu Asn Met Tyr Arg Gln Glu Gln Arg Met Ile Asp Ala Phe  
                   530                  535                  540  
 Glu Asn Val Gln Ala Ser Leu Leu Ala Thr Ala Glu Arg Gly Asn Lys  
 545                  550                  555                  560  
 Leu Glu Lys Lys Leu Ala Leu His Tyr Gly Gly Tyr Gln Asn Arg Ala  
                   565                  570                  575  
 Lys Thr Leu Arg Thr Lys Ile Val Glu Ala Ser Ser Ala Leu Glu Asn  
                   580                  585                  590  
 Ser Lys Tyr Glu Leu Asn Ala Phe Gln Thr Leu Gln Ile Ser Glu Glu  
                   595                  600                  605  
 Ser Ala Ile Ser Arg Arg Leu Glu Lys Leu Arg Asp Asp Val Ala Phe  
                   610                  615                  620  
 Val Leu Lys Arg Glu Arg Glu Ala Gln Glu Thr Tyr Arg Ile Arg Lys  
 625                  630                  635                  640  
 Glu Glu Leu Asp Glu Leu Val Ala Gly Thr Glu Ala Val Val Asn Gly  
                   645                  650                  655  
 Trp His

<210> 42904  
 <211> 136  
 <212> PRT  
 <213> A.fumigatus

<400> 42904  
 Val Ser Lys Tyr Gly Leu Asn Gln Trp Ala Arg Val Ser Ser Leu Leu  
 1                  5                  10                  15  
 Ala Arg Lys Thr Pro Lys Gln Cys Lys Ala Arg Trp Val Gln Trp Leu  
                   20                  25                  30  
 Asp Pro Gly Ile Arg Lys Val Glu Trp Ser Arg Glu Glu Asp Glu Lys  
                   35                  40                  45  
 Leu Leu His Leu Ala Lys Leu Met Pro Thr Gln Trp Arg Thr Ile Ala  
                   50                  55                  60  
 Pro Ile Val Gly Arg Thr Ala Thr Gln Cys Leu Glu Arg Tyr Gln Lys  
 65                  70                  75                  80  
 Leu Leu Asp Glu Ala Glu Ala Arg Glu Asn Asp Glu Leu Gly Leu Gly  
                   85                  90                  95  
 Gly Pro Ser Gly Gly Glu Ala Ala Ala Pro Ser Ala Asp Asp Val Arg  
                   100                  105                  110  
 Arg Leu Arg Tyr Glu Val Ala Pro Ile Gly Lys Asp Val Arg Phe Ala  
                   115                  120                  125  
 Asp Asn Phe Glu Asp Pro Val Asn  
                   130                  135

<210> 42905  
 <211> 428  
 <212> PRT  
 <213> A.fumigatus

<400> 42905  
 Arg Met Gln Leu Glu Trp Ile Asp Ala Ser Arg Leu Asp Leu Ser His  
 1                  5                  10                  15



## 19313

Glu Val Glu Trp Pro Gln Pro Glu Lys Pro Glu Lys Lys Lys Thr Gly  
 20 25 30  
 Val Gly Asn Lys Ala Pro Ser Lys Asn Ala Gln Lys Arg Ala Arg Ala  
 35 40 45  
 Asp Ser Arg Asp Val Ser Ala Thr Pro Asp Leu Leu Thr Gly Lys Asn  
 50 55 60  
 Val Asn Val Gly Lys Ala Gln Arg Pro Ser Lys Ala Gly Gly Lys Glu  
 65 70 75 80  
 Asn Arg Asp Gly Thr Pro Leu Ser Met Pro Ile Val Thr Ala Glu Ala  
 85 90 95  
 Ile Ser Thr Asp Gly Thr Pro Lys Ala Glu Ser Asp Asp Val Glu Met  
 100 105 110  
 Val Asp Val Ser Phe Thr Asp Gly Lys Ser Ile Lys Glu Glu Glu Arg  
 115 120 125  
 Ala Leu Gly Leu Met Ser Arg Glu Glu Glu Ile Glu Arg Leu Arg Thr  
 130 135 140  
 Ser Gly Ser Met Thr Gln Asn Pro Thr Glu Ile His Arg Val Arg Asn  
 145 150 155 160  
 Leu Asn Arg Leu Gln Met Gly Lys Tyr Asp Ile Glu Pro Trp Tyr Phe  
 165 170 175  
 Ser Pro Tyr Pro Ala Ser Phe Ser Asp Ala Asp Ile Ile Tyr Ile Asp  
 180 185 190  
 Glu Phe Cys Leu Ser Tyr Phe Asp Asp Lys Arg Ala Phe Glu Arg His  
 195 200 205  
 Arg Thr Lys Cys Thr Leu Val His Pro Pro Gly Asn Glu Ile Tyr Arg  
 210 215 220  
 Asp Asp Tyr Ile Ser Phe Phe Glu Val Asp Gly Arg Arg Gln Arg Thr  
 225 230 235 240  
 Trp Cys Arg Asn Leu Cys Leu Leu Ser Lys Leu Phe Leu Asp His Lys  
 245 250 255  
 Thr Leu Tyr Tyr Asp Val Asp Pro Phe Leu Phe Tyr Cys Met Cys Thr  
 260 265 270  
 Arg Asp Glu Thr Gly Cys His Leu Val Gly Tyr Phe Ser Lys Glu Lys  
 275 280 285  
 Asp Ser Ala Glu Gly Tyr Asn Leu Ala Cys Ile Leu Thr Leu Pro Gln  
 290 295 300  
 Tyr Gln Arg Arg Gly Phe Gly Arg Leu Leu Ile Ser Phe Ser Tyr Glu  
 305 310 315 320  
 Leu Ser Lys Arg Glu Gly Lys Leu Gly Ser Pro Glu Lys Pro Leu Ser  
 325 330 335  
 Asp Leu Gly Leu Leu Gly Tyr Arg Gln Tyr Trp Arg Glu Thr Leu Val  
 340 345 350  
 Glu Ile Leu Met Glu Pro Gly Arg Glu Thr Val Ser Glu Asn Glu Leu  
 355 360 365  
 Ala Leu Leu Thr Ser Met Thr Glu Lys Asp Val His Glu Thr Leu Val  
 370 375 380  
 Val Leu Asn Met Leu Arg Tyr Tyr Val Cys Ala Leu Thr Pro Ser His  
 385 390 395 400  
 Leu Lys Pro Asp Ile Pro Leu Glu Gln Leu Thr Asp Tyr Leu Ile Glu  
 405 410 415  
 Arg Lys Leu Gly His Arg Ser His Arg Leu Arg Gly  
 420 425

&lt;210&gt; 42906

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42906

Pro His Ser Gly Val Leu Ala Glu Lys Pro Ser Glu Glu Leu Phe Val  
 1 5 10 15  
 Ile Asp Lys Lys Gly Ser Ala Glu Ile Arg Asn Ala Tyr Phe Lys Gln  
 20 25 30  
 His Lys Pro Leu Lys Ala Asp Glu Ile Leu Ala Gln Arg Ser Ala Ile  
 35 40 45  
 Pro Ala Val Asp Thr Arg Lys Arg Leu Asn Ser Lys Val Thr Asp Gly  
 50 55 60  
 Val Ile Glu Pro Lys Ser Lys Arg His Lys Ser Asp Trp Val Thr Arg  
 65 70 75 80  
 Lys Glu Trp Leu Arg Leu Lys Gln Val Ala Lys Glu Ala Asn Pro Thr  
 85 90 95  
 Gln Thr Ala Glu Glu Ser Glu Leu Tyr Asp Pro Trp Ala Asp Ser Glu  
 100 105 110  
 Asp Pro Thr Pro Val Glu Asp Pro Gln Phe Asp Tyr Leu Glu Lys Pro  
 115 120 125  
 Lys Pro Lys Val Ala Pro Pro Thr Ile Lys Gln Pro Pro Ile Ser Leu  
 130 135 140  
 Ala Ala Asn Gly Lys Pro Ile Pro Ser Val Arg Lys Pro Asp Ala Gly  
 145 150 155 160  
 Ile Ser Tyr Asn Pro Ser Phe Glu Asp Trp Asp Arg Leu Leu Gln Glu  
 165 170 175  
 Lys Gly His Glu Ala Val Glu Ala Glu Lys Lys Arg Leu Glu Glu Glu  
 180 185 190  
 Arg Lys Glu Gln Glu Arg Gln Arg Leu Ile Ala Glu Ala Gln Asn Asp  
 195 200 205  
 Asp Gly Glu Val Lys Ser Asp Asp Glu Ser Ala Trp Glu Gly Phe Glu  
 210 215 220  
 Ser Glu Tyr Glu Lys Pro Glu Trp Leu Asn Lys Lys Arg Pro Ala Arg  
 225 230 235 240  
 Lys Thr Lys Ala Glu Arg Asn Arg Ile Lys Arg Arg Lys Glu Ala Glu  
 245 250 255  
 Arg Lys Ala Arg Trp Glu Ala Lys Met Lys Gln Lys Glu Glu Gln Leu  
 260 265 270  
 Glu Gln Ala Lys Ala Ile Ala Glu Gln Val Gln Gln Arg Gln Leu Glu  
 275 280 285  
 Arg Ser Arg Glu Ser Gly Asp Asp Ser Ser Glu Glu Gly Asp Asp Ala  
 290 295 300  
 Ala Leu Arg Arg Lys Pro Leu Gly Lys Ala Arg Tyr Val Phe Leu Gly  
 305 310 315 320  
 Leu Asp Phe Arg Ile Ser His Val Leu Ile Trp Gln  
 325 330

&lt;210&gt; 42907

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42907

Pro Leu Leu Ser Ala Glu Ile Gly Lys Tyr Val Ala Met Asp Cys Glu  
 1 5 10 15  
 Met Val Gly Val Gly Pro Asn Pro Asp Asn Asp Ser Ala Leu Ala Arg  
 20 25 30

## 19315

Val Ser Ile Val Asn Phe Asn Gly Glu Gln Val Tyr Asp Ser Tyr Val  
 35 40 45  
 Arg Pro Lys Glu Met Val Thr Asp Trp Arg Thr His Val Ser Gly Ile  
 50 55 60  
 Ser Pro Lys His Met Ala Glu Ala Arg Ser Leu Glu Gln Val Gln Lys  
 65 70 75 80  
 Asp Val Ala Glu Ile Leu Asp Gly Arg Ile Leu Val Gly His Ala Val  
 85 90 95  
 Ser Asn Asp Leu Asp Ala Leu Leu Leu Gly His Pro Lys Arg Asp Ile  
 100 105 110  
 Arg Asp Thr Ser Lys His Pro Pro Tyr Arg Lys Ile Ala Gly Gly Gly  
 115 120 125  
 Ser Pro Arg Leu Lys Ile Leu Ala Ser Glu Phe Leu Gly Leu Asn Ile  
 130 135 140  
 Gln Asp Gly Ala His Ser Ser Val Glu Asp Ala Lys Ala Thr Met Leu  
 145 150 155 160  
 Leu Tyr Arg Arg Asp Lys Glu Gly Phe Glu Arg Glu His Leu Lys Lys  
 165 170 175  
 Trp Pro Ile Arg Val Val Val Asp Lys Lys Glu Asn Gly Glu Asp Gln  
 180 185 190  
 Lys Lys Lys Lys Lys Lys Lys Lys Gln Pro Arg Lys Arg  
 195 200 205

&lt;210&gt; 42908

&lt;211&gt; 1122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42908

His Pro Ser Phe Thr Ala Val Gln Pro Thr Pro Pro Lys His Leu Thr  
 1 5 10 15  
 Asp Glu Glu Leu Lys Gln Gln Tyr Gly Ile His Met Thr Ser Arg Ile  
 20 25 30  
 Gln Glu Asp Gly Gly Gly Thr Glu Ala Lys Trp Ala Asp Ile Asp Asp  
 35 40 45  
 Asp Glu Asp Asp Trp Ala Pro Glu Thr Ile Glu Trp Thr Asp Gly Thr  
 50 55 60  
 Lys Thr Ser Leu Thr Thr His Thr Glu Ala Val His Ala Pro Gly Gln  
 65 70 75 80  
 Asp Thr Lys Thr Ala Asn Glu Ala Lys Ala Asp Ser Pro Ala Pro Glu  
 85 90 95  
 Gln Ala Pro Ala Thr Lys Glu Val Thr Lys Ile Val Thr Lys Pro Thr  
 100 105 110  
 Thr Thr Ile Gly Pro Asn Pro Thr Val Leu Arg Leu Gly Ala Asn Ala  
 115 120 125  
 Glu Arg Gln Ala Lys Ser Ala Thr Ile Leu Ser Arg Gly Pro Asn Asp  
 130 135 140  
 Lys Thr Ser Leu Ser Ser Thr Ser Pro Ala Pro Pro Ser Lys Ser Pro  
 145 150 155 160  
 Trp Ala Pro Leu Pro Pro Val Glu Lys Val Ser Pro Val Met Pro Pro  
 165 170 175  
 Val Gln Ala Gln Pro Pro Gly Arg Ala Pro Val Arg Glu His Gln Val  
 180 185 190  
 Ser Glu Pro Pro Thr Gly Asn Val His Pro Lys Glu Ile Ala Ala Asp  
 195 200 205  
 Asp Phe Asn Arg Ser Trp Lys Asp Thr His Ser Gly Thr Thr Arg Glu

|   |   |     |     |     |
|---|---|-----|-----|-----|
| 210   |   | 215 |     | 220 |
| Leu Tyr Asn Ser Arg   | Ser Gly Arg Tyr Glu Pro Val Pro Glu Arg Lys |     |     |     |
| 225   | 230   | 235 | 240 |     |
| Ala Pro Trp Arg Ala Glu Gln Gln Gly Phe Arg Pro Ser Ser Leu Leu |   |     |     |     |
|   | 245   | 250 | 255 |     |
| Gln Arg Pro Thr Pro Gly Glu Gln Ala Gly Pro Ala Glu Pro Ser Pro |   |     |     |     |
|   | 260   | 265 | 270 |     |
| Ala Phe Gln Thr His Arg Ser Ser Gly Gln Asp Ala Gly His Trp Thr |   |     |     |     |
|   | 275   | 280 | 285 |     |
| Arg Arg Arg Ala Ser Ser Asn Val Ser Gly Gly Ser Gly Ser Phe Gly |   |     |     |     |
|   | 290   | 295 | 300 |     |
| Arg Arg Met Ser Ile Gly Arg Pro Asp Gly Pro Gln Arg Thr Phe Glu |   |     |     |     |
| 305   | 310   | 315 | 320 |     |
| Ala Arg Arg Gly Ser Gln Val Asn Gly Ile Met Asp Pro Ser Leu Gln |   |     |     |     |
|   | 325   | 330 | 335 |     |
| Asn Lys Glu Ser Val His Pro Lys Asp Ala Ser Met His Glu Ala Ser |   |     |     |     |
|   | 340   | 345 | 350 |     |
| Ser Ala Arg His Pro Pro Gly Pro Thr Trp Pro Pro Arg Ala Ala Ala |   |     |     |     |
|   | 355   | 360 | 365 |     |
| Gly Pro Pro Asp Ser Val Ala Asn Ala Ser Arg Ala Ala Ser Gln Ser |   |     |     |     |
|   | 370   | 375 | 380 |     |
| Ser Val His Pro Ala Pro Glu Ala Gln Asp Ala Thr Ala Gln Ala Pro |   |     |     |     |
| 385   | 390   | 395 | 400 |     |
| Gln Glu Asp Pro Val Ala Met Gln Glu Arg Ile Met Lys Glu Lys Arg |   |     |     |     |
|   | 405   | 410 | 415 |     |
| Leu Glu Ala Arg Gln Arg Arg Leu Glu Gln Glu Glu Lys Glu Glu Ala |   |     |     |     |
|   | 420   | 425 | 430 |     |
| Ala Lys Arg Glu Arg Ile Arg Gln Lys Leu Glu Ala Leu Gly Pro Pro |   |     |     |     |
|   | 435   | 440 | 445 |     |
| Pro Glu Lys Pro Lys Ser Lys Asn Lys Glu Ser Arg Glu Gly Asp Lys |   |     |     |     |
|   | 450   | 455 | 460 |     |
| Ala Glu Ala Lys Ala Thr Pro Thr Val Ala Gln Ala Ala Gln Ser Pro |   |     |     |     |
| 465   | 470   | 475 | 480 |     |
| Pro Lys Pro Pro Val Pro Glu Pro Ser Gly Glu Pro Lys Gln Tyr Gly |   |     |     |     |
|   | 485   | 490 | 495 |     |
| Met Met Lys Val His His Pro Asp Thr Val Lys Lys Leu Val Ala Ala |   |     |     |     |
|   | 500   | 505 | 510 |     |
| Asn Glu Lys Glu Arg Ala Ala Glu Arg Ser Ala Pro Thr Val Asn Ala |   |     |     |     |
|   | 515   | 520 | 525 |     |
| Arg Arg Pro Ala Ser Pro Ala Arg Asp Pro Lys Leu Glu Ala Thr Thr |   |     |     |     |
|   | 530   | 535 | 540 |     |
| Gly Pro Gln Glu Pro Ser Asp Phe Arg Gln Ser Arg Leu Pro Glu Lys |   |     |     |     |
| 545   | 550   | 555 | 560 |     |
| Leu Pro Glu Ser Arg Thr Glu Glu Pro Ser Ser Gln Trp Lys Ser Asn |   |     |     |     |
|   | 565   | 570 | 575 |     |
| Leu Ser Thr Ser Ser Tyr Ser Pro Trp Ser Ser Asn Thr Lys Leu     |   |     |     |     |
|   | 580   | 585 | 590 |     |
| Gly Ala Ala Ser Ser Ser Ile Ala Asn Pro Trp Lys Pro Leu Ser Asn |   |     |     |     |
|   | 595   | 600 | 605 |     |
| Asp Lys Thr Leu Gly Asn Gly Ile Phe Asp Gln Ala Leu Gly Gly Phe |   |     |     |     |
|   | 610   | 615 | 620 |     |
| Pro Ser Arg Asp Ile Ser Leu Arg Gly Pro Leu Gly Leu Asp Gln Pro |   |     |     |     |
| 625   | 630   | 635 | 640 |     |
| Pro Ile Ser Ser Gly Pro Gln Pro Phe Ser Ala Pro Ser Arg Pro Gln |   |     |     |     |
|   | 645   | 650 | 655 |     |
| Pro Glu Pro Thr Ser Ile Ser Pro Leu Pro Pro Thr Asp Val Arg His |   |     |     |     |

|      |      |     |     |     |     |     |     |     |     |      |      |     |     |     |      |      |  |  |  |  |  |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|------|------|--|--|--|--|--|
| 660  |      |     |     |     |     |     |     |     |     | 665  |      |     |     |     | 670  |      |  |  |  |  |  |
| Ala  | Gln  | Tyr | Asp | Ser | Met | Thr | Pro | Ala | Val | Arg  | Pro  | Gly | Pro | Ile | Gly  |      |  |  |  |  |  |
| 675  |      |     |     |     |     |     |     |     |     | 680  |      |     |     |     | 685  |      |  |  |  |  |  |
| Pro  | Pro  | Ser | Val | His | Gln | Ser | His | Trp | Gln | Gln  | Glu  | Pro | Arg | Val | Thr  |      |  |  |  |  |  |
| 690  |      |     |     |     |     |     |     |     |     | 695  |      |     |     |     | 700  |      |  |  |  |  |  |
| Gly  | Thr  | Thr | Ala | Trp | Asn | Asn | Phe | His | Ala | Val  | Ala  | Ala | Lys | Arg | Glu  |      |  |  |  |  |  |
| 705  | 710  |     |     |     |     |     |     |     |     |      | 715  |     |     |     |      | 720  |  |  |  |  |  |
| Ala  | Glu  | Glu | Asn | Glu | Lys | Leu | Leu | Asn | Glu | Met  | Asn  | Thr | Met | Arg | Asp  |      |  |  |  |  |  |
| 725  |      |     |     |     |     |     |     |     |     | 730  |      |     |     |     | 735  |      |  |  |  |  |  |
| Ser  | Gln  | Pro | Leu | His | Val | Ala | Phe | Asn | Glu | Thr  | Trp  | Arg | Gln | Val | Arg  |      |  |  |  |  |  |
| 740  |      |     |     |     |     |     |     |     |     | 745  |      |     |     |     | 750  |      |  |  |  |  |  |
| Thr  | Gly  | Asp | Gln | Ser | Gly | Gln | Arg | Gln | Val | Val  | Gly  | Ile | His | Arg | Pro  |      |  |  |  |  |  |
| 755  |      |     |     |     |     |     |     |     |     | 760  |      |     |     |     | 765  |      |  |  |  |  |  |
| Thr  | Asp  | Thr | Ser | Ser | Ser | Ile | Ser | Asn | His | Leu  | Pro  | Gly | Phe | Asp | His  |      |  |  |  |  |  |
| 770  |      |     |     |     |     |     |     |     |     | 775  |      |     |     |     | 780  |      |  |  |  |  |  |
| Pro  | Val  | Ala | Thr | Leu | Pro | Phe | Ala | Asp | Thr | His  | Ala  | Arg | Pro | Leu | Ser  |      |  |  |  |  |  |
| 785  | 790  |     |     |     |     |     |     |     |     |      | 795  |     |     |     |      | 800  |  |  |  |  |  |
| Ser  | Val  | Pro | Val | Arg | Ser | Ser | Arg | Phe | Phe | Pro  | Gln  | Ala | Thr | Glu | Gln  |      |  |  |  |  |  |
| 805  |      |     |     |     |     |     |     |     |     | 810  |      |     |     |     | 815  |      |  |  |  |  |  |
| Tyr  | Lys  | Arg | Pro | Ala | Phe | Glu | Glu | Asp | Glu | His  | Phe  | Arg | Ser | Pro | Ser  |      |  |  |  |  |  |
| 820  |      |     |     |     |     |     |     |     |     | 825  |      |     |     |     | 830  |      |  |  |  |  |  |
| Pro  | Pro  | Pro | Pro | Glu | Glu | Leu | Ser | Ser | His | Pro  | Val  | Tyr | Met | Ser | Asp  |      |  |  |  |  |  |
| 835  |      |     |     |     |     |     |     |     |     | 840  |      |     |     |     | 845  |      |  |  |  |  |  |
| Ser  | Thr  | Arg | Pro | Leu | Val | His | Leu | Pro | Ala | Pro  | Lys  | Pro | Ile | Val | Lys  |      |  |  |  |  |  |
| 850  |      |     |     |     |     |     |     |     |     | 855  |      |     |     |     | 860  |      |  |  |  |  |  |
| Leu  | Pro  | Pro | Lys | Val | Val | Ala | Pro | Pro | Pro | Pro  | Pro  | Pro | Pro | Pro | Pro  |      |  |  |  |  |  |
| 865  | 870  |     |     |     |     |     |     |     |     |      | 875  |     |     |     |      | 880  |  |  |  |  |  |
| Thr  | Phe  | Ala | Ser | Met | Val | Ala | Ala | Pro | Pro | Arg  | Leu  | Ser | Ala | Gln | Ala  |      |  |  |  |  |  |
| 885  |      |     |     |     |     |     |     |     |     | 890  |      |     |     |     | 895  |      |  |  |  |  |  |
| Gln  | Pro  | Val | Ser | Thr | Ala | Thr | Ser | Trp | Gln | Glu  | Lys  | Ile | Asn | Cys | Leu  |      |  |  |  |  |  |
| 900  |      |     |     |     |     |     |     |     |     | 905  |      |     |     |     | 910  |      |  |  |  |  |  |
| Phe  | Gly  | Lys | Lys | Thr | Val | His | Glu | Lys | Lys | Asn  | Ala  | Leu | Ala | Val | Thr  |      |  |  |  |  |  |
| 915  |      |     |     |     |     |     |     |     |     | 920  |      |     |     |     | 925  |      |  |  |  |  |  |
| Ser  | Ala  | Ser | Lys | Glu | Pro | Leu | Asp | Val | Gln | Leu  | His  | Ile | Ala | Ala | Val  |      |  |  |  |  |  |
| 930  |      |     |     |     |     |     |     |     |     | 935  |      |     |     |     | 940  |      |  |  |  |  |  |
| Ser  | Val  | Ser | Leu | Pro | Tyr | Leu | Ala | Glu | Asp | Met  | Thr  | Gln | Val | Gly | Asp  |      |  |  |  |  |  |
| 945  | 950  |     |     |     |     |     |     |     |     |      | 955  |     |     |     |      | 960  |  |  |  |  |  |
| Gly  | Ile  | Ala | Ser | Ala | Lys | Gln | Val | Glu | Glu | Thr  | Glu  | Glu | Ile | Phe | Glu  |      |  |  |  |  |  |
| 965  |      |     |     |     |     |     |     |     |     | 970  |      |     |     |     | 975  |      |  |  |  |  |  |
| Asp  | Arg  | Glu | Ala | Gly | Ser | Leu | Pro | Val | Val | Arg  | Val  | Pro | Asn | Ala | Ala  |      |  |  |  |  |  |
| 980  |      |     |     |     |     |     |     |     |     | 985  |      |     |     |     | 990  |      |  |  |  |  |  |
| Pro  | Pro  | Ala | Ala | Trp | His | Ala | Ala | Pro | Ala | Pro  | Ser  | Gln | Ser | Arg | Phe  |      |  |  |  |  |  |
| 995  |      |     |     |     |     |     |     |     |     | 1000 |      |     |     |     | 1005 |      |  |  |  |  |  |
| Arg  | Phe  | Lys | Ser | Leu | Lys | Pro | Met | Gln | Ile | His  | Ser  | Ile | Glu | Pro | Tyr  |      |  |  |  |  |  |
| 1010 |      |     |     |     |     |     |     |     |     | 1015 |      |     |     |     | 1020 |      |  |  |  |  |  |
| Ile  | Leu  | Gly | Leu | Gly | Asp | Arg | Asp | Ser | Ser | Gly  | Asn  | Phe | Arg | Val | Ser  |      |  |  |  |  |  |
| 1025 | 1030 |     |     |     |     |     |     |     |     |      | 1035 |     |     |     |      | 1040 |  |  |  |  |  |
| Ile  | Arg  | Phe | Pro | Gly | Ala | Ile | Ala | Ala | Lys | Thr  | Val  | Thr | Leu | Pro | Lys  |      |  |  |  |  |  |
| 1045 |      |     |     |     |     |     |     |     |     | 1050 |      |     |     |     | 1055 |      |  |  |  |  |  |
| Lys  | Ala  | Glu | Ser | Gln | Asn | Pro | Arg | Gln | Arg | Gly  | Pro  | Ser | Thr | Phe | Lys  |      |  |  |  |  |  |
| 1060 |      |     |     |     |     |     |     |     |     | 1065 |      |     |     |     | 1070 |      |  |  |  |  |  |
| Leu  | Arg  | Lys | Asn | Thr | Lys | Ala | Arg | Glu | Gly | Pro  | Gly  | Asn | Ser | Ile | Asn  |      |  |  |  |  |  |
| 1075 |      |     |     |     |     |     |     |     |     | 1080 |      |     |     |     | 1085 |      |  |  |  |  |  |
| Lys  | Lys  | Thr | Thr | Thr | Thr | Gln | Gln | Asn | Gly | Gly  | Ser  | Ala | Ser | Ser | Pro  |      |  |  |  |  |  |
| 1090 |      |     |     |     |     |     |     |     |     | 1095 |      |     |     |     | 1100 |      |  |  |  |  |  |
| Arg  | His  | Gln | Pro | Arg | Asn | Thr | Thr | Trp | Ala | Pro  | Arg  | Thr | Ser | Ser | Ala  |      |  |  |  |  |  |

## 19318

1105                      1110                      1115                      1120  
Ser His

<210> 42909  
<211> 68  
<212> PRT  
<213> A.fumigatus

<400> 42909  
Gly Lys Phe Leu Glu Phe Pro Phe Gly Phe Phe Arg Leu Arg Glu Arg  
1                      5                      10                      15  
Arg Gln Leu Ala Thr Asn Ser Leu Thr Asp Gly Phe Leu Val Gln Ser  
                    20                      25                      30  
Asp Ile Ser Arg Cys Gly Ala Asn Gln Leu Ser Ala Phe His Leu Ile  
                    35                      40                      45  
Glu Arg Glu Leu Ile Ser Arg Ser Pro Glu Arg Gly Cys Pro Trp Pro  
                    50                      55                      60  
Asp Pro Thr Met  
65

<210> 42910  
<211> 139  
<212> PRT  
<213> A.fumigatus

<400> 42910  
Cys Phe Ser Ile Ala His Ile Phe Gly Met Asp Val Asn Asn Leu Ser  
1                      5                      10                      15  
Ser Asn Trp Lys Lys Leu Gln Glu Thr Leu Lys Lys Gln Ser Ala Ser  
                    20                      25                      30  
Ser Ser Ser Lys Lys Arg Lys Thr Ser Asp Arg Glu Thr Gln Asn Val  
                    35                      40                      45  
Thr Thr Lys Lys Gln Lys Ile Glu Thr Ile Glu Arg Lys Lys Ser Ser  
                    50                      55                      60  
Leu Lys Lys Lys Arg Met Ser Glu Gly Gln Glu His Gly Gly Asp Glu  
65                      70                      75                      80  
Ser Ala Gln Glu Pro Met Val Lys Thr Ile Ser His Lys Ser Ser Thr  
                    85                      90                      95  
Ala Thr Ile Ser Glu Gln Ser Arg Thr Glu Ser Lys Pro Thr Lys Val  
                    100                      105                      110  
Asn Glu Gly Arg Ser Pro Thr Leu Val Ile Pro Ile Gln Tyr Ile Gln  
                    115                      120                      125  
Pro Ala Ser Ser Asp Pro Ser Ser Val Gln Lys  
                    130                      135

<210> 42911  
<211> 87  
<212> PRT  
<213> A.fumigatus

<400> 42911  
Leu Ser Gln Ser Gly Thr Pro Arg Ser Tyr Asp Thr Thr Gly Asp Ser  
1                      5                      10                      15  
Gly Lys Leu Asn Lys His Phe Phe Cys Gly Asp Cys Gly Ser Ser Leu  
                    20                      25                      30

## 19319

Tyr Ser Glu Leu Glu Ile Met Ser Asp Lys Thr Gly Ile Lys Ala Gly  
 35 40 45  
 Thr Leu Asp Gly Gly Glu Ala His Leu Arg Asn Lys Val Asp Val Glu  
 50 55 60  
 Phe Tyr Val Lys Asp Arg Val His Tyr Leu Asn Ala Leu Asp Asn Val  
 65 70 75 80  
 Arg Gln Glu Pro Arg Leu Gly  
 85

&lt;210&gt; 42912

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42912

Tyr Cys Glu Glu Asp Ile Phe Ala Ser Gln Leu Arg Glu Ser Glu Arg  
 1 5 10 15  
 Glu Cys Asn Val Lys Ser Gly Met Ala Gly Asn Pro Ala Val Leu Ser  
 20 25 30  
 Thr Ile Pro Leu Asp Tyr His Ile Ser Ile Ile Asn Gln Leu Phe Gly  
 35 40 45  
 Pro Gly Ser Ala Ala Pro Pro Ala Val Arg Leu Pro Ser Tyr Leu Val  
 50 55 60  
 Gly Leu Pro Asp Arg Leu His Ser Asp Asp Ile Glu Tyr Leu Arg Cys  
 65 70 75 80  
 Ser Gly Ala Leu Asp Leu Pro Ser Glu Thr Leu Arg Asn Glu Leu Leu  
 85 90 95  
 Lys Ser Tyr Leu Leu Trp Val His Pro His Met Pro Ile Leu Gly Leu  
 100 105 110  
 His Glu Phe Leu Ser Ala Val Ala Gly Asp Asn Glu Ser His Arg Ile  
 115 120 125  
 Ser Leu Leu Leu Phe His Ala Val Leu Phe Ala Ala Ser Ala Phe Val  
 130 135 140  
 Asp Glu Cys His Ile Arg Ala Glu Gly Tyr Pro Ser Arg Ser Val Phe  
 145 150 155 160  
 Arg Glu Ser Ile Ser Cys Lys Val Lys Val His Phe Ala Pro Ala Pro  
 165 170 175  
 Thr Thr Ala Val Gln Thr His Leu Cys Arg Cys Phe Ser Ile Ser Asn  
 180 185 190  
 Ala Lys Met Thr Asp Ser Leu Leu Leu Lys Arg Phe Cys Tyr Gly Tyr  
 195 200 205  
 Leu Ile Leu Ser His Thr Thr Thr Lys Lys Asn Ser Pro Ser Gly Trp  
 210 215 220  
 Val Ser Ala Ser Leu  
 225

&lt;210&gt; 42913

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42913

Leu Ala Arg Met Ile Tyr Tyr Leu Val Glu Cys Cys His Leu Cys Thr  
 1 5 10 15  
 Thr Trp Ile Leu His Thr Gly Ser Trp Pro Lys Glu Gln Thr Leu Thr  
 20 25 30

# 19320

Arg Val Asn Asp Leu Gly Trp Thr Pro Leu Val Gln Val Ala His His  
 35 40 45  
 Gly Arg Asp Asp Ile Phe Asp Leu Ala Val Lys Lys Lys Ser Arg Cys  
 50 55 60  
 Gln Cys Lys Asp Ser Trp Gly Arg Thr Ala Leu Ser Phe Ala Ala Glu  
 65 70 75 80  
 His Gly Ser Glu His Lys Val Arg Ser Leu Leu Asn Arg Lys Ala Asp  
 85 90 95  
 His Arg Phe Pro Arg Tyr Arg Thr Pro Leu Thr Tyr Ala Ala Arg Asn  
 100 105 110  
 His His Leu Gln Val Val Leu Leu Leu Leu Arg His Thr Glu Gly Val  
 115 120 125  
 Asp Phe Ala Asp Glu Ser Leu Arg Pro Ala Val Thr Ser Ala Val Ala  
 130 135 140  
 Phe Ser Asp Val Val Phe Leu Glu Leu Val Ile Glu Lys Gly Lys Leu  
 145 150 155 160  
 Ser Asp Ser Ile Arg Thr Val Arg Arg His Phe Asn Ala Gln Gln Ala  
 165 170 175  
 Trp Glu Phe Ala Arg Arg Lys Val Ala Ala  
 180 185

<210> 42914  
 <211> 160  
 <212> PRT  
 <213> A.fumigatus

<400> 42914  
 Asp Ser Arg Arg Val Asp Ala Asp Leu Glu Ala Lys Asn Thr Met Asp  
 1 5 10 15  
 Glu Thr Pro Gln His Cys Ala Ala Ile Asn Gly Ser Arg Ser Ala Val  
 20 25 30  
 Arg Leu Leu Leu Glu Lys Gly Val Asn Val Glu Leu His Asp Lys Ser  
 35 40 45  
 Ala Leu Val Pro Leu Leu Leu Glu Ala Ser Lys Gly His Thr Ala Val  
 50 55 60  
 Val Cys Leu Leu Leu Glu Tyr Ser Ala Ser Ile Asp Pro Thr Asn Ala  
 65 70 75 80  
 Asp Gly Asp Thr Ala Leu Met Ile Ala Val His Asn Gly His His Glu  
 85 90 95  
 Thr Ile Leu Ser Leu Leu Ala Arg Ser Val Ala Ile Asp Cys Val Asn  
 100 105 110  
 His Ala His Gln Thr Ala Leu Ser Arg Ala Ala Glu Asn Asp His Asp  
 115 120 125  
 Lys Ile Val Glu Ile Leu Leu Gln Tyr Gly Thr Glu Val Asp Leu Pro  
 130 135 140  
 Asn His Thr Gly Gln Thr Pro Leu Thr Leu Ser Asp Thr Lys Lys Lys  
 145 150 155 160

<210> 42915  
 <211> 426  
 <212> PRT  
 <213> A.fumigatus

<400> 42915  
 Glu Tyr Ile Leu Gln Ser Lys Gly Thr Phe Cys Pro Cys Pro Asp His  
 1 5 10 15



## 19321

Gly Gly Pro Asn Ser Phe Val Gln Val Leu Leu Asp Phe Glu Cys Glu  
 20 25 30  
 Asp Asp Arg Leu Ala Thr Ala Gln Ala Leu Leu Leu Trp Val Ser His  
 35 40 45  
 Pro Glu Pro His His Asp Gln Lys Glu Leu Thr Gln Arg Leu Gly Ile  
 50 55 60  
 Cys Ile Ser Met Ile Ser Ser Ser Gln Thr Gln Ile Val Lys Ala Asn  
 65 70 75 80  
 Ala Arg Lys Gln Gln Ile Trp Arg Arg Thr Trp Trp Ser Ile Tyr Asn  
 85 90 95  
 His Val Arg Ile Thr Ser Ser Asn Pro Leu Thr Leu Lys His Asp Pro  
 100 105 110  
 Glu Asn Gly Asp Leu Cys Asp Thr Pro Leu Pro Ser Thr His Asp Phe  
 115 120 125  
 Arg Phe Gly Ala Leu Ser Pro Asn Val Gln Thr Leu Val Gly Asn Cys  
 130 135 140  
 Asp Phe Leu Arg Asp Val Gln Tyr Gln Gln Phe Leu Ala Arg Leu Phe  
 145 150 155 160  
 Ile Glu Lys Ser Lys Leu Cys Gln Val Gly Gln Phe Pro Gly Pro Ser  
 165 170 175  
 Gly Asp Leu Ser Asp Ser Ser Ser Arg Val Val Gly Leu Ala Ser Ala  
 180 185 190  
 Glu Asn Lys Ala Cys Pro Thr Glu Ile Ala Glu Leu Ala Arg Arg Leu  
 195 200 205  
 Gly Arg Trp His Thr Gln Leu Pro Pro Ala Leu Arg His Gln Ser Thr  
 210 215 220  
 Thr Ser Thr Ala Val Thr Glu Leu Glu Lys Phe Ile Leu Val His Arg  
 225 230 235 240  
 Ala Trp Leu Leu Leu Leu Tyr Leu Ala Ser Ala Tyr Val Val Cys Thr  
 245 250 255  
 Cys Ser Val Gly Arg Asn Ser His Ala Glu Glu His Ile Leu Asn Arg  
 260 265 270  
 Thr Ser Leu Val Phe Asp Glu Leu His Arg Leu Gly Phe Ile Asn Val  
 275 280 285  
 Leu Pro Asn Pro Ser Val Ala Ile Leu Met Pro Ala Val Glu Phe His  
 290 295 300  
 Ile Thr Ala Val Glu Ser Ala Cys Pro Gln Thr Asn Gly Ala Ser Gln  
 305 310 315 320  
 Arg Met Leu Gln Gln Phe Ser Glu Ile Leu His Gln Leu Gln Gly Ser  
 325 330 335  
 Ser Ala Leu Ala Gly Arg Met Ile Glu Lys Leu Asn Asn Ile Thr Ala  
 340 345 350  
 Thr Glu Thr Lys Asp Asp Leu Ser Arg Val Ile Ala Ser Glu Ser Ala  
 355 360 365  
 Ile Ala Glu Gln Ser Val Ser Asn Ala Asp Phe Val Leu Asp Glu Thr  
 370 375 380  
 Asp Asp Phe Tyr Ser Phe Leu Glu Phe Gly Met Ser Phe Ala Asn Val  
 385 390 395 400  
 Ile Pro Leu Val Asp Asn Ser Pro Asn Ile Gly Leu Asp Pro Pro Leu  
 405 410 415  
 Cys Asn Glu Ser Tyr Phe Ser Gln Leu Pro  
 420 425

&lt;210&gt; 42916

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42916

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Gln | Gly | Glu | Glu | Trp | Lys | Ser | Leu | Arg | Lys | Arg | Phe | Asn | Pro | Gly |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Phe | Ala | Pro | Gln | His | Ile | Leu | Thr | Leu | Leu | Pro | Cys | Ile | Leu | Asp | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Val | Pro | Phe | Phe | Glu | Thr | Leu | Asp | Arg | Tyr | Ala | Glu | Ser | Gly | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Phe | Ser | Leu | Ala | Glu | Thr | Cys | Thr | Asn | Leu | Thr | Phe | Asp | Ile | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Gly | Thr | Asp | Leu | Thr | Val | Ser |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 42917

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42917

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Leu | Cys | Trp | Cys | Ser | His | Ser | Gly | Thr | Gly | Ala | Val | Thr | Met | Asp |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Glu | Asp | Leu | Gly | Ala | Gln | Leu | Pro | Leu | Asp | Lys | Gln | Ser | Glu | Met | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Leu | Tyr | His | Glu | Leu | Thr | Ala | Ser | Tyr | His | Gln | Lys | Ser | Ser | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Ala | Lys | Pro | Ser | Asn | Pro | Leu | Val | Ile | Trp | Gln | Gln | Tyr | Lys | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Arg | Lys | Leu | Asn | Ala | Ile | Ile | Lys | Asn | His | Ile | Lys | Arg | Lys | Phe |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |
| Ala | Glu | Leu | Lys | Glu | Ala | Ser | Ser | Asp | Glu | Lys | Lys | Ser | Arg | Ser | Val |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Ala | Leu | Ser | Leu | Gln | Gly | Ile | Glu | Lys | Leu | Asp | Ala | His | Val | Leu |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Gln | Thr | Cys | Asp | Gln | Leu | Lys | Thr | Phe | Leu | Phe | Ala | Gly | His | Asp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Thr | Thr | Ser | Ile | Val | Leu | Gln | Trp | Ala | Phe | Tyr | Glu | Leu | Ser | Arg | Thr |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Arg | Val | Leu | Glu | Ser | Ile | Ser | Arg | Glu | Leu | Asp | Asp | Val | Phe | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Pro | Asp | Pro | Ser | Pro | Ala | Val | Val | Arg | Asp | Lys | Leu | Leu | Ala | Pro | Asn |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Gly | Glu | Leu | Leu | Ser | Lys | Leu | Pro | Tyr | Thr | Thr | Ala | Val | Ile | Lys |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Glu | Ile | Leu | Arg | Val | Tyr | Pro | Ser | Ser | Gly | Thr | Gly | Arg | Leu | Val | Pro |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Glu | Gly | Ser | Asp | Val | Tyr | Ile | Gln | Leu | Pro | Asp | Gly | Arg | Ser | Leu | Cys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Asp | Gly | Val | Leu | Met | Tyr | Asn | Cys | Glu | Thr | Leu | Ile | His | Arg | Asp |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Glu | Thr | Val | Tyr | Gly | Glu | Ser | Lys | Asp | Asp | Phe | Leu | Pro | Glu | Arg | Trp |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Leu | Gly | Asp | Ser | Gly | Ala | Asp | Arg | Ile | Pro | Ser | Ser | Ala | Trp | Arg | Pro |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |
| Phe | Glu | Arg | Gly | Pro | Arg | Ser | Cys | Ile | Gly | Gln | Gly | Leu | Ala | Thr | Ile |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |

## 19323

Glu Ala Gln Val Ile Leu Ala Cys Ala Val Arg Gln Tyr Glu Phe Ala  
 290 295 300  
 Lys Ile Gly Leu Gly Glu Val Ala Arg Asp Asn Ala Gly Glu Pro Ile  
 305 310 315 320  
 Leu Gly Pro Gln Gly Gln Tyr Glu Val Lys Ser Lys Leu Phe Asn Val  
 325 330 335  
 Ser Leu Pro Val Ser Phe Trp Asp Leu Ser Thr Ala Leu Thr Phe Lys  
 340 345 350  
 Leu Asp Asn Ala Ser Asp Cys Lys Ala Gly Arg Trp Asn Asp Asn Glu  
 355 360 365  
 Ser Glu Val Val Leu Arg Trp  
 370 375

&lt;210&gt; 42918

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42918

His Arg Gln Ser Thr Ser Ile Ser Thr Met Thr Val Cys Val Ile Phe  
 1 5 10 15  
 Cys Asn Leu Tyr Cys Arg Thr Asn Thr Thr Val Glu Ser Ile Lys Asn  
 20 25 30  
 Ala Ala Ser Thr Ala Ala Tyr Gly Ala Met Ser Tyr Tyr His Gly Asn  
 35 40 45  
 Glu Ser Gly Gln Ile Pro Gly Ala Phe Pro Thr Lys Trp Trp Glu Gly  
 50 55 60  
 Ser Ala Leu Phe Met Ala Met Leu Gln Tyr Gln Tyr Phe Thr Gly Asp  
 65 70 75 80  
 His Thr Tyr Asn Ser Asp Val Ser Leu Gly Leu Gln Trp Gln Ala Gly  
 85 90 95  
 Asp Gly Asp Tyr Met Pro Ser Asn Tyr Ser Ser Tyr Leu Val Ser Thr  
 100 105 110  
 Val Pro Asn Lys Leu Lys Val Arg Cys Val  
 115 120

&lt;210&gt; 42919

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (121)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42919

Arg Ser Lys Gly Asn Asp Asp Gln Met Phe Trp Gly Leu Ala Ala Met  
 1 5 10 15  
 Leu Ala Ala Glu Leu Gln Phe Pro Asp Arg Ser Glu Gly Tyr Ser Trp  
 20 25 30  
 Leu Ser Leu Ala Gln Gly Val Tyr Asn Thr Gln Val Asp Arg Trp Asp  
 35 40 45  
 Thr Ser Thr Cys Gly Gly Gly Leu Arg Trp Gln Ile Tyr Thr Tyr Gln  
 50 55 60  
 Ala Gly Tyr Thr Met Lys Asn Ala Ile Ser Asn Gly Gly Leu Phe Gln

## 19324

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Leu | Ala | Ala | Arg | Leu | Ala | Arg | Tyr | Thr | Asn | Asn | His | Thr | Tyr | Tyr | Glu |
|     |     | 85  |     |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Trp | Ala | Glu | Lys | Val | Trp | Asp | Trp | Ser | Cys | Ser | Ser | Pro | Leu | Leu | Asn |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | His | His | Gly | His | Gly | Arg | Thr | Xaa | Asp | Cys | Val |     |     |     |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     |     |     |     |

&lt;210&gt; 42920

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (108)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42920

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ser | Asp | Asp | Glu | Glu | Glu | Ala | Tyr | Phe | Pro | Gly | Glu | Phe | Glu | Asn |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Arg | Ile | Ser | Arg | Leu | Lys | Thr | Leu | Ser | Lys | Val | Gln | Asn | Val | Val | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Phe | Asp | Lys | Arg | Cys | Gly | Val | Ser | Arg | His | His | Trp | Ile | Thr | Lys |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Pro | Pro | Gln | Thr | Val | Ala | Phe | Arg | Lys | Lys | Ala | Leu | Ser | Val | Leu | Phe |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Trp | Leu | Pro | Ser | Leu | Glu | Ala | Pro | Leu | Gln | Ser | Leu | Gly | Ile | Gln |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| His | Leu | Gln | Asp | Val | Asn | Ile | Lys | Asp | Asp | Glu | Leu | Ser | Glu | Arg | Ile |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Thr | Lys | Val | Leu | Arg | Asn | Leu | Arg | Ala | Leu | Ser | Xaa | Ser | Ile | Val | Ser |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Glu | His | Asn | Thr | Ala | Thr | Thr | Asp | Pro | Gln | Gly | Leu | Trp | Asp | Arg |     |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Asp | Arg | Phe | Ser | Leu | Phe | Pro | Glu | Ser | Arg | Ser | Phe | Phe | Cys | Lys | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Val | Ser | Val | Ala | Glu | Thr | Asn | His | Ile | Leu | Ser |     |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     |

&lt;210&gt; 42921

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42921

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Gly | Gly | Ile | Pro | Gly | His | Thr | Ala | Leu | His | Val | Ala | Phe | Ser | Leu |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Ala | Phe | Pro | Glu | Leu | Arg | Gly | Glu | Tyr | Ile | Leu | Phe | Thr | Ile | Ser | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Leu | Ile | Asn | Thr | Leu | Tyr | Leu | Thr | Glu | Ser | Asp | Thr | Pro | Gly | Gln |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Tyr | Val | Ser | Asn | Glu | Phe | Gly | Ser | Ser | Val | Thr | Leu | Arg | Ala | Leu | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Gln | Ser | Ala | Met | Pro | Ser | Ile | Tyr | Leu | Glu | Trp | Leu | Trp | Leu | Leu | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |

## 19325

Met Thr His Gly Val Leu Pro Cys Ala Ser Gln Ser Asn Leu Ala Arg  
                     85                    90                    95  
 Arg Gln Asp Glu His Glu Pro Pro Leu Thr Pro Thr  
                     100                    105

<210> 42922  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 42922  
 Asp Ile Val Asn Phe Leu Pro Cys Leu Phe Thr Phe Arg Val Ala Pro  
 1                    5                    10                    15  
 Val Lys Val Asn Gly Ala Gly Val Thr Leu Gln Pro Phe Ser Tyr Ala  
                     20                    25                    30  
 Ile Leu Leu Ser Phe Leu Pro Ile Leu Phe Thr Ser Pro Arg Leu Ser  
                     35                    40                    45  
 Glu Ile Gly Arg Leu Lys Arg Arg Glu Tyr Ser Gly Arg  
                     50                    55                    60

<210> 42923  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 42923  
 Arg Phe Ile Leu Gln Ile Thr Ile Pro Val Ser Glu Asn Tyr Pro Trp  
 1                    5                    10                    15  
 His Thr Gln Ile Gln Arg Asp Pro Phe His Tyr Asn Thr Ala Pro Thr  
                     20                    25                    30  
 Ser Ile Asp Pro Arg Leu Ile Leu Asp Leu Arg Phe Phe Gly Tyr Val  
                     35                    40                    45  
 Met Pro Val Tyr Glu Asn Tyr Val Glu Phe Ser Ser Glu Ile Thr Asp  
                     50                    55                    60  
 Leu Phe Gly Met Pro Gln Val Arg Pro Pro Phe Gln Phe Pro Val Leu  
 65                    70                    75                    80  
 Arg Ala

<210> 42924  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

<400> 42924  
 Thr Trp Cys Pro Ser Arg Ile Gly Ile Ser Asn Thr Glu Phe Ser Pro  
 1                    5                    10                    15  
 Gly Ser Met Leu Asn Ile Ala Ser Glu Leu Gly Asp Phe Ile Pro Gly  
                     20                    25                    30  
 Gly Glu Pro Lys Phe Leu Ala Pro Gly Ala Ala Thr His Ile Cys Gly  
                     35                    40                    45  
 Thr Thr Arg Ala Gly Lys Glu Asp Asp Gly His Ser Val Val Asp Lys  
                     50                    55                    60  
 Asp Ser Lys Val Trp Arg Leu Glu Asn Leu Phe Ile Gly Gly Cys Gly  
 65                    70                    75                    80  
 Val Ile Pro Thr Gln Asn Ala Cys Asn Pro Thr Leu Thr Ala Ala Cys

## 19326

85 90 95  
 Phe Ala Ile Ala Ser Ala Arg Lys Val Val Glu Glu Ile Gln Ala Leu  
 100 105 110  
 Lys Gly Gln Gln Tyr Gln Ser Lys Arg Leu His His Gly Ala Gly Arg  
 115 120 125  
 Ile Arg Ser Val Leu Lys Ser Arg Gly Val Leu  
 130 135

&lt;210&gt; 42925

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42925

Val Thr Phe Thr Leu Ser Thr Pro Val Asn Glu Ile Ser Arg Phe Leu  
 1 5 10 15  
 Asn Asn Leu Gln Glu Arg Lys Leu Ser Arg His Ser Leu Trp Arg Gln  
 20 25 30  
 Thr Leu Val Ile Cys Asn Pro Ile Val Ile Phe Leu Asn Gln Ala Arg  
 35 40 45  
 Lys Asp Cys Ser Ala Ile Met Thr Pro Ala Arg Cys Ile Glu Ala Ser  
 50 55 60  
 Met Ser Glu Gln Glu Gly Ser His Tyr Val Arg Thr His Glu Tyr Thr  
 65 70 75 80  
 Ser Gly Ser Ala Lys Thr Arg Leu Pro Ile Ser Ala Pro Ser Phe Tyr  
 85 90 95  
 Asp Asp Asp Asn Ser Leu Gln Glu Val Ile Ser His Thr Ser His Asp  
 100 105 110  
 Phe Gln Glu Gly Glu Phe Val Cys Pro Gly Phe Phe Gln Met Val Asn  
 115 120 125  
 Pro Gly Asn Phe Val His Arg Val Met Ala Pro Asp Trp Asp Tyr Met  
 130 135 140  
 Met Arg Arg Gln Ala Gln Ala Ile Leu Pro Phe Leu Tyr Leu Gly Pro  
 145 150 155 160  
 Val Ser Cys Leu Lys Asp Lys Ala Trp Leu Ala Gln Glu Gly Phe Thr  
 165 170 175  
 Leu Leu Leu Ala Ile Arg Asn Lys Arg Ser Ala Gln Ala Arg Leu Val  
 180 185 190  
 Ser Gly Glu Lys Val Gly Ala Glu Leu Gly Ile Glu Ala Asp Ala Val  
 195 200 205  
 Asp Val Met Asp Asn Gln Glu Leu Ile Ser Ala Phe Pro Tyr Ala Ile  
 210 215 220  
 Arg Arg Ile Asn Asp His Leu Val Ser Cys Gly Pro Ala Val His Ser  
 225 230 235 240  
 Asn Ala Pro Lys Lys Ile Phe Val Phe Cys Glu Ser Gly Asn Glu Arg  
 245 250 255  
 Ser Ala Thr Val Val Ile Ala Tyr Leu Met Val Met Leu Asn Leu Asn  
 260 265 270  
 Met Ala Val Ala Ser His Leu Val Gln Leu Arg Arg Phe Cys Ile Cys  
 275 280 285  
 Val Glu Glu Pro Leu Arg Glu Leu Leu Ala Ser Phe Gln Ser Ile Leu  
 290 295 300  
 Asp Ala Lys Arg Asp Val Tyr Lys Ala Ile Gln Ala Ser Thr Ser Asp  
 305 310 315 320  
 Ser Thr Ser Gly Ile Pro Gln Ala Thr Val Ser Arg Lys Arg Asn Ile  
 325 330 335

## 19327

Ala Asp Arg Phe Asp Glu Pro Thr Gly Ser Gly Gly Asp Met Leu Gly  
                   340                  345                  350  
 Leu Glu Met Asp Met Asn Met Asn Ile Met Asp Asp Gly Ala Ile Asp  
                   355                  360                  365  
 Ser Arg Lys Pro Leu Ala Pro Phe Gln Asp Arg Ser Asp  
           370                  375                  380

<210> 42926

<211> 129

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (116)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42926

Val Ser Asp Ile Glu Leu Arg Cys Ala Leu Leu Arg Thr Val Leu Arg  
 1                  5                  10                  15  
 Ser Ala Asn Arg Asp His Leu Leu Thr Gly Leu Ala Gly Gln Glu Leu  
                   20                  25                  30  
 Gln Ala Val Pro Arg Val Leu Pro Asp Trp Leu Ile Pro Glu Thr Lys  
                   35                  40                  45  
 Ala His Leu Val Gln Ala Gly Arg Ala Leu Ser Asp Arg Pro Glu Gln  
                   50                  55                  60  
 Phe Glu Arg Leu Glu Asp Glu Asp Asp Ser Pro Gly Leu Lys Glu Arg  
 65                  70                  75                  80  
 Phe Asn Trp Tyr Met Lys Pro Ser Asp Lys Ser Asn Tyr Lys Glu Ile  
                   85                  90                  95  
 Leu Ser Ala Asn Pro Asn His Arg Gly Glu Asn Tyr Cys Phe His Ser  
                   100                  105                  110  
 Ser Phe Ser Xaa Leu Ser Leu Phe Ala Ile Asn Pro Pro Pro Pro Pro  
           115                  120                  125  
 Pro

<210> 42927

<211> 573

<212> PRT

<213> A.fumigatus

<400> 42927

Ser Thr Thr Glu Pro Pro Ile Pro Pro Asn Arg Arg Phe Ala Ala Asn  
 1                  5                  10                  15  
 Ile Ile Glu Phe Leu Glu Pro Ser Asn Gln His Ile Ile Ser Leu Pro  
                   20                  25                  30  
 Leu Leu Leu Lys Met Pro Leu Ser Lys Glu Asn Arg Met Gln Met Ala  
                   35                  40                  45  
 Ile Ser Ala Tyr Lys Lys Gly Gln Phe Lys Ser Lys Ala Ala Ala Ala  
                   50                  55                  60  
 Lys Val Phe Gly Val Ser Arg Glu Thr Leu Arg Asp Arg Leu Arg Gly  
 65                  70                  75                  80  
 Ile Lys Pro Arg Ala Glu Thr Arg Ala Asn Ser His Lys Leu Thr Ala  
                   85                  90                  95  
 Leu Glu Glu Glu Ala Leu Ala Lys Arg Leu Leu Asp Ala Asp Arg Arg

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Phe | Ser | Ile | Arg | Pro | Gln | Phe | Leu | Arg | Gly | Met | Ala | His | Ile | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Cys | Ala | Arg | Thr | Asn | Asp | Pro | Thr | Ser | Val | Ile | Gly | Val | Asn | Trp |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Tyr | Lys | Phe | Ile | Lys | Arg | His | Pro | Ala | Leu | Arg | Thr | Arg | Tyr | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Arg | Ile | Ser | Tyr | Gln | Arg | Ala | Lys | Gln | Glu | Asp | Pro | Lys | Ile | Ile |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Lys | Gln | Trp | Phe | Glu | Leu | Val | His | Ala | Thr | Ile | Gln | Glu | Tyr | Gly | Ile |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| His | Glu | Asn | Asp | Ile | Trp | Asn | Phe | Asp | Glu | Thr | Gly | Phe | Ala | Met | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | Cys | Thr | Thr | Ser | Lys | Val | Ile | Thr | Ala | Val | Asp | Arg | Ser | Glu | Arg |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Pro | Arg | Thr | Val | Ile | Gln | Gly | Asn | Arg | Glu | Trp | Val | Thr | Ile | Ile | Glu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Cys | Val | Ser | Ser | Lys | Gly | Ile | Ser | Ile | Pro | Pro | Val | Val | Ile | Leu | Lys |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Gly | Lys | Glu | His | Gln | Ala | Pro | Trp | Tyr | Gln | Glu | Ser | Asn | Leu | Pro | Pro |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Asp | Trp | Arg | Leu | Thr | Asn | Ser | Thr | Asn | Gly | Trp | Thr | Thr | Asp | Glu | Ile |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Gly | Leu | Lys | Trp | Leu | Lys | Glu | Val | Phe | Asn | Pro | Phe | Ser | Ser | Leu | His |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Ser | Thr | Gly | Ala | Lys | Arg | Leu | Leu | Ile | Leu | Asp | Gly | His | Ser | Ser | His |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Gln | Thr | Ala | Glu | Phe | Asp | Asp | Phe | Cys | Lys | Glu | Asn | Ala | Ile | Ile | Cys |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Leu | Cys | Met | Pro | Pro | His | Thr | Ser | His | Leu | Leu | Gln | Pro | Leu | Asp | Val |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Gly | Val | Phe | Gly | Pro | Leu | Lys | Arg | Ser | Tyr | Gly | Lys | Leu | Val | Glu | Gly |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Met | Met | Val | Ala | Gly | Asn | Asn | His | Ile | Asp | Lys | Glu | Asp | Phe | Leu | Tyr |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Leu | Tyr | Pro | Pro | Ala | Arg | Glu | Ala | Val | Leu | Asn | Gln | Arg | Asn | Ile | Cys |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Asn | Gly | Phe | Lys | Gly | Ser | Gly | Leu | Arg | Pro | Leu | Asn | Lys | Asp | Gln | Val |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Leu | Glu | Lys | Ile | Thr | Phe | Gln | Leu | Arg | Thr | Pro | Thr | Pro | Pro | Pro | Leu |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Ile | Glu | Gly | Ser | Ile | Ser | Ser | Ala | Phe | Gln | Thr | Pro | Gln | Asn | Pro | Arg |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Gln | Leu | Asp | His | Lys | Val | Arg | Ser | Leu | Gln |     |     |     |     |     |     |



| Variable            | Mean | SD   | Min | Max  | Median | Q1  | Q3   | Mode | Skewness | Kurtosis | Normality |
|---------------------|------|------|-----|------|--------|-----|------|------|----------|----------|-----------|
| Age                 | 35.2 | 12.5 | 18  | 65   | 32     | 28  | 38   | 35   | 0.15     | 3.2      | 0.95      |
| Gender              | 1.2  | 0.4  | 1   | 2    | 1      | 1   | 1    | 1    | 0.05     | 2.1      | 0.98      |
| Education           | 12.5 | 2.1  | 9   | 16   | 12     | 11  | 13   | 12   | 0.10     | 2.8      | 0.96      |
| Income              | 1500 | 500  | 500 | 3000 | 1200   | 800 | 1800 | 1000 | 0.20     | 3.5      | 0.94      |
| Marital Status      | 1.5  | 0.5  | 1   | 2    | 1      | 1   | 1    | 1    | 0.05     | 2.1      | 0.98      |
| Occupation          | 2.5  | 1.2  | 1   | 4    | 2      | 1   | 3    | 2    | 0.10     | 2.8      | 0.96      |
| Health Status       | 1.8  | 0.6  | 1   | 2    | 1      | 1   | 1    | 1    | 0.05     | 2.1      | 0.98      |
| Stress Level        | 3.5  | 1.5  | 1   | 5    | 3      | 2   | 4    | 3    | 0.15     | 3.2      | 0.95      |
| Life Satisfaction   | 4.2  | 1.0  | 1   | 5    | 4      | 3   | 5    | 4    | 0.10     | 2.8      | 0.96      |
| Resilience          | 3.8  | 1.2  | 1   | 5    | 3      | 2   | 4    | 3    | 0.15     | 3.2      | 0.95      |
| Optimism            | 4.0  | 1.1  | 1   | 5    | 4      | 3   | 5    | 4    | 0.10     | 2.8      | 0.96      |
| Emotional Stability | 3.6  | 1.3  | 1   | 5    | 3      | 2   | 4    | 3    | 0.15     | 3.2      | 0.95      |
| Self-Esteem         | 4.1  | 1.0  | 1   | 5    | 4      | 3   | 5    | 4    | 0.10     | 2.8      | 0.96      |
| Life Satisfaction   | 4.2  | 1.0  | 1   | 5    | 4      | 3   | 5    | 4    | 0.10     | 2.8      | 0.96      |
| Resilience          | 3.8  | 1.2  | 1   | 5    | 3      | 2   | 4    | 3    | 0.15     | 3.2      | 0.95      |
| Optimism            | 4.0  | 1.1  | 1   | 5    | 4      | 3   | 5    | 4    | 0.10     | 2.8      | 0.96      |
| Emotional Stability | 3.6  | 1.3  | 1   | 5    | 3      | 2   | 4    | 3    | 0.15     | 3.2      | 0.95      |
| Self-Esteem         | 4.1  | 1.0  | 1   | 5    | 4      | 3   | 5    | 4    | 0.10     | 2.8      | 0.96      |

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<210> 42928
<211> 723
<212> PRT
<213> A.fumigatus
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|     |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | His   | Thr | Pro | Ser | Ile | Arg | Val | Ser | Arg | Ile | Gly | Leu | Thr | Met | Arg | Leu |
| 1   |       |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Glu   | Ser | Ile | Arg | Pro | Pro | Glu | Arg | Phe | Asn | Ser | Glu | Leu | Ile | Ile |     |
|     |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Thr | Pro   | Ser | Pro | Lys | Lys | Thr | Leu | Arg | Glu | Pro | Arg | Asn | Pro | Arg | Asn |     |
|     |       | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Pro | Arg   | Phe | Val | Asp | Tyr | Asn | Pro | His | Leu | Pro | Pro | Ala | Val | Phe | Pro |     |
|     | 50    |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Thr | Leu   | Glu | Pro | Ala | Asn | Leu | Ala | Gln | Ser | Arg | Thr | Gly | Glu | Gln | Asp |     |
| 65  |       |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Arg | Gln   | Lys | Thr | Glu | Gln | Asn | Gly | Val | Ala | Lys | Gly | Leu | Gln | Arg | Asp |     |
|     |       |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |     |
| Thr | Ser   | Ser | Ile | Asp | Phe | His | Gly | Ser | Asn | Thr | Glu | Gly | Lys | Glu | Thr |     |
|     |       | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |     |
| Trp | Glu   | Lys | Val | Asp | Asp | Ile | Ser | Ile | Asp | Glu | Leu | Glu | Asn | Ile | Ile |     |
|     |       | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Ala | Ser   | Asn | Gly | Glu | Leu | Asn | Pro | Ile | Tyr | Val | Arg | Asn | Met | Thr | Ile |     |
|     | 130   |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Met | Glu   | Ala | Ala | Glu | Thr | Ser | Ser | Ser | Ser | Asp | Met | Asp | Met | Ser | Asp |     |
| 145 |       |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Ser | Asp   | Pro | Asp | Glu | Pro | Leu | Thr | Asp | Val | Asp | Gly | Arg | His | Ala | Glu |     |
|     |       |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Val | Cys   | Val | Leu | Ala | Glu | Tyr | Thr | Pro | Tyr | Phe | Arg | Ala | Asp | Ser | Ser |     |
|     |       |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |
| Gln | Val   | His | Gln | Val | His | Ser | Pro | Ser | Arg | Trp | Ser | Asp | Leu | Ser | Leu |     |
|     | 195   |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| Ser | Leu   | Gln | Ala | Glu | Ile | Ala | Ile | Asn | Leu | Ser | Gln | His | Tyr | Gly | Trp |     |
|     | 210   |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |     |
| Ser | Thr   | Val | Tyr | Ser | Lys | Leu | Gly | Leu | Gly | Glu | Lys | Glu | Arg | Glu | Glu |     |
| 225 |       |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Leu | Gln   | Glu | Leu | Ile | Arg | Arg | Arg | Asp | His | Gln | Val | Ala | Met | Glu | Tyr |     |
|     |       |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |
| Ser | Ala   | Leu | His | Ala | Met | Arg | Ala | Lys | Gln | Leu | Arg | Ala | Leu | Leu | Arg |     |
|     |       |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |     |
| Ile | Asp   | Asn | Ser | Ser | Gly | Ser | Arg | Asn | Arg | Thr | Pro | His | Lys | Leu | Ile |     |
|     | 275   |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |
| Phe | Arg   | Arg | Ile | Ser | Arg | Lys | Thr | Ala | Gln | Arg | Leu | Arg | Gly | Ser | Met |     |
|     | 290   |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |     |
| Glu | Thr   | Asp | Tyr | Leu | Leu | Cys | Asp | Val | Gly | Glu | Leu | Val | Asn | Ala | Arg |     |
| 305 |       |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |     |
| Arg | Phe   | Leu | Gln | Arg | Arg | Gly | Ile | Asp | Arg | His | Tyr | Ala | Gly | Glu | Trp |     |
|     |       |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |     |
| Ser | Gly</ |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

## 19330

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Pro Phe Gly Val Gly Ser Ile Thr Val Asn Asp His Arg His Asp Phe
  370                      375                      380
Ala Asp Ser Ser Arg Pro Asn Pro Ala Thr Pro Pro His Arg Ile Ile
385                      390                      395                      400
Gln Thr Thr Glu His Asn Glu Gly Ala Leu Val Gln Tyr Gln Lys Arg
                      405                      410                      415
Asp Leu Pro Pro Arg Lys Leu Tyr His Arg Gly Glu Arg Asp Arg Arg
                      420                      425                      430
Leu Ile Val Arg Phe Lys Leu Gly Gln Pro Arg Ala Lys Phe Phe Gln
                      435                      440                      445
Ala Trp Lys Lys Ser Ala His Pro Arg Arg Leu Ile Arg Ser Val Pro
                      450                      455                      460
Pro Leu Asp Val Phe Tyr Lys Ser Ser Ser Ser Pro Gly Glu Phe Asp
465                      470                      475                      480
Gly Gly Ala Gly Thr Thr Ser Thr Phe Ala Ser Asn Ser Ser Asp Ser
                      485                      490                      495
Ala Leu Asn Ile Phe Lys Gln Ser Pro Arg Lys Ala Ile Asn Glu Asp
                      500                      505                      510
Trp Lys Arg Gly Leu Leu Glu Leu Asp Asp Thr Ser Leu Ser Ser Cys
                      515                      520                      525
Trp Arg Lys Phe Gln Gln Glu Leu Gln Gln Ala Thr Phe Asp Pro Asp
                      530                      535                      540
Thr Ile Glu Thr Asp Thr Ile Glu Thr Asp Thr Ile Glu Thr Asp Thr
545                      550                      555                      560
Ile Glu Thr Asp Thr Ile Glu Thr Asp Thr Ile Glu Thr Val Gly Val
                      565                      570                      575
Leu Asp Ser Gly Val Asp Thr Asp Arg His Ser Glu Leu Ser Glu Ala
                      580                      585                      590
Ile Pro Cys Ile Asn Leu Thr Asp Val His Leu Pro Ser Arg Leu Thr
                      595                      600                      605
Thr Pro Ser Arg Val Met Ser Pro Met Ser Val Asp Tyr Ile Gln Ser
                      610                      615                      620
Asp Glu Asp Asp Leu Ala Pro Phe Ser Gly Ala Arg Thr Ser Arg Thr
625                      630                      635                      640
Asp Pro Val Phe Asp Ser Pro Gly Ser Ser Cys Trp Glu Thr Ser Ser
                      645                      650                      655
Asp Gly Ala Ala Ala Tyr Ser Pro Thr Thr Pro Leu Thr Thr Val Thr
                      660                      665                      670
Asn Thr Phe Glu Ile Leu Glu Asp Asn Asn Ser Glu Lys Ser Asp Asp
                      675                      680                      685
Asp Trp Glu Asp Ala Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
690                      695                      700
Asp Glu Met Ile Leu Val Pro Ala Ile Gly Pro Val Arg Arg Ala Ala
705                      710                      715                      720
Ala Gln Arg

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&lt;210&gt; 42929

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42929

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Asp Pro Asp Phe Glu Asp Ile Gln Leu Gln Tyr Phe Gln Phe Arg Arg
1                      5                      10                      15
Leu Arg Ile Ser Ala Met Ser Asn Lys Lys Ile Glu Gln Trp Glu Ile

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## 19331

|                 |                     |                 |                 |  |    |
|-----------------|---------------------|-----------------|-----------------|--|----|
|                 | 20                  |                 | 25              |  | 30 |
| Glu Arg Tyr Trp | Glu Ile Phe Ser Ser | Leu Ala Asn Gly | His Pro Arg     |  |    |
|                 | 35                  | 40              | 45              |  |    |
| Leu Asn Ser Ser | Gln Ala Ala Ser     | Val Leu Arg Asn | Ser Arg Leu Ser |  |    |
|                 | 50                  | 55              | 60              |  |    |
| Asp Asp Gln Leu | Glu Lys Val Trp     | Asp Leu Ala Asp | Val Asp Ser Asp |  |    |
| 65              | 70                  | 75              | 80              |  |    |
| Gly Glu Leu Asp | Phe Glu Glu Phe     | Cys Val Ala Met | Arg Leu Val Phe |  |    |
|                 | 85                  | 90              | 95              |  |    |
| Asp Leu Val Asn | Gly Val Ser Gln     |                 |                 |  |    |
|                 | 100                 |                 |                 |  |    |

&lt;210&gt; 42930

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42930

|                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| Lys His Ser Ile | Ser Pro Ser Pro | Leu Thr Thr Ser | Ile Glu Pro Ala |
| 1               | 5               | 10              | 15              |
| Lys Asp Trp Ser | Glu Arg Ala Thr | Pro Arg Ala Gln | Thr Arg Gln Asp |
|                 | 20              | 25              | 30              |
| Phe Glu Asn Ile | Asp Leu Leu Ser | Gln Pro Ser Val | Leu Thr Asp Glu |
|                 | 35              | 40              | 45              |
| Ile Ser Ala Pro | Lys Gln His Thr | Pro Lys Asp Ser | Thr Phe Cys Glu |
| 50              | 55              | 60              |                 |
| Pro Ser Ile Leu | Val His Gln Asn | Ile Pro Pro Val | Gln Thr Thr Gly |
| 65              | 70              | 75              | 80              |
| Ser Leu Pro Ser | Ser Pro Arg Gly | Ser Thr Asp Pro | Arg             |
|                 | 85              | 90              |                 |

&lt;210&gt; 42931

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42931

|                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| Pro Ile Tyr Thr | Leu Ile Ala Ala | Asn Phe Thr Thr | Trp Cys Lys Tyr |
| 1               | 5               | 10              | 15              |
| Glu Leu Phe Ala | Thr Thr Phe Asn | Leu Gly Leu Arg | Met Arg Met Leu |
|                 | 20              | 25              | 30              |
| Pro Cys Ile Ser | Phe Lys Leu Leu | Tyr Ile Met His | Val Thr Ala Val |
|                 | 35              | 40              | 45              |
| Asp Ile Thr Ile | Phe Gly Arg Phe | Trp Gly Phe Ala | Phe Tyr Gly Tyr |
| 50              | 55              | 60              |                 |
| Arg Lys Gly Gly | Arg Gly Ser Lys | Ala Pro Cys Ser | Tyr Cys Leu     |
| 65              | 70              | 75              |                 |

&lt;210&gt; 42932

&lt;211&gt; 464

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42932

|                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| Arg Ser Val Cys | Asp Pro Leu Arg | Asp Thr Cys His | Gly Tyr Phe Ser |
| 1               | 5               | 10              | 15              |

## 19332

Ser Ser Ser Phe Phe Asp Met Ala Leu Ile Leu Val Leu Ile Ala Leu  
 20 25 30  
 Val Phe Phe Ser Thr Gly Ala Tyr Tyr Leu Gly Ser Leu Lys Pro Ala  
 35 40 45  
 Ser Leu Pro Thr Ser Ser Thr Thr Thr Leu Phe Glu Ile Glu Pro Pro  
 50 55 60  
 Leu His Asn Ile Ser Pro Ala Asn Leu Gln Ala Ala Trp Ala Asp Phe  
 65 70 75 80  
 Val Glu Ile Leu Gly Lys Glu Asn Val Ser Thr Glu His Gly Asp Leu  
 85 90 95  
 Asp Val His Ser Gly Ser Asp Trp Ser Ser Tyr Thr Leu Lys Lys Asp  
 100 105 110  
 Glu Arg Pro Phe Leu Val Leu Tyr Pro Ser Thr Thr Glu Glu Val Ser  
 115 120 125  
 Arg Ile Met Lys Val Cys His Gln Arg Val Ile Pro Val Thr Pro Tyr  
 130 135 140  
 Ser Gly Gly Thr Ser Leu Glu Gly His Phe Ala Pro Thr Arg Gly Gly  
 145 150 155 160  
 Val Cys Ile Asp Phe Arg Arg Met Asn Arg Ile Leu Glu Leu His Lys  
 165 170 175  
 Lys Asp Phe Asp Val Val Val Gln Pro Ala Val Gly Trp Glu Asp Leu  
 180 185 190  
 Asn Glu Glu Leu Ser Lys Asp Gly Leu Phe Phe Pro Pro Asp Pro Gly  
 195 200 205  
 Pro Gly Ala Met Ile Gly Gly Met Val Gly Thr Gly Cys Ser Gly Thr  
 210 215 220  
 Asn Ala Tyr Arg Tyr Gly Thr Met Arg Glu Trp Val Leu Ser Leu Thr  
 225 230 235 240  
 Val Val Leu Ala Asp Gly Thr Val Ile Lys Thr Arg Gln Arg Pro Arg  
 245 250 255  
 Lys Ser Ser Ala Gly Tyr Asp Leu Thr Arg Leu Phe Ile Gly Ser Glu  
 260 265 270  
 Gly Thr Leu Gly Leu Val Thr Glu Ala Thr Leu Lys Leu Thr Val Lys  
 275 280 285  
 Pro Lys Ser Gln Ser Val Ala Val Ala Ser Phe Pro Ser Ile His Asn  
 290 295 300  
 Ala Ala Glu Cys Val Thr Arg Val Val Glu Glu Gly Ile Pro Val Ala  
 305 310 315 320  
 Gly Val Glu Ile Leu Asp Asp Val Gln Met Lys Cys Ile Asn Asp Ser  
 325 330 335  
 Arg Thr Thr Arg Arg Gln Trp Lys Glu Ser Pro Thr Leu Phe Phe Lys  
 340 345 350  
 Phe Thr Gly Thr Pro Val Gly Val Lys Glu Gln Ile Glu Leu Val Arg  
 355 360 365  
 Lys Ile Val Ser Ser Ser Ala Gly Gln Ser Phe Glu Phe Ala Arg Gly  
 370 375 380  
 Glu Asp Glu Met Lys Glu Leu Trp Ser Ala Arg Lys Glu Ala Leu Trp  
 385 390 395 400  
 Ser Val Met Ser Met Arg Arg Gly Pro Glu Asp Arg Val Trp Thr Thr  
 405 410 415  
 Asp Val Ala Val Pro Met Ser Lys Leu Pro Asp Ile Ile Glu Ala Thr  
 420 425 430  
 Lys Gln Asp Met Thr Glu Ser Gly Leu Leu Ala Gly Ile Cys Gly His  
 435 440 445  
 Val Gly Asp Gly Asn Phe His Gly Thr Thr Pro Ala Phe Phe His His  
 450 455 460

<210> 42933  
 <211> 120  
 <212> PRT  
 <213> A.fumigatus

<400> 42933  
 Val Lys Val Gln Thr Asn Ile Phe Pro Ile Phe Leu Ala Ile Ile Leu  
 1 5 10 15  
 Phe Asn Glu Asp Glu Lys Lys Ile Ala Glu Gly Val Val His Arg Met  
 20 25 30  
 Val Lys Arg Ala Val Glu Met Glu Gly Thr Val Thr Gly Glu His Gly  
 35 40 45  
 Val Gly Leu Ile Lys Arg Asp Tyr Leu Gln His Glu Val Gly Glu Thr  
 50 55 60  
 Thr Val Asp Thr Met Arg Arg Val Ser Tyr Glu Ser Ser Cys Met Thr  
 65 70 75 80  
 Ala Phe Asp Pro Asp Val Asp Ser Met Gln Ile Lys Met Ala Leu Asp  
 85 90 95  
 Pro Leu Arg Leu Leu Asn Cys Asp Lys Val Val Arg Val Glu Gln Pro  
 100 105 110  
 Thr Thr Val Glu Leu Lys Lys Trp  
 115 120

<210> 42934  
 <211> 602  
 <212> PRT  
 <213> A.fumigatus

<400> 42934  
 Glu Gly Ala Gly Gly Asp Tyr Gly Ile His Ala Lys Cys Ile Ser Ile  
 1 5 10 15  
 Leu Thr Gln Val Cys Thr Lys Ser Ser Ala Leu Arg Leu Pro Phe Leu  
 20 25 30  
 Thr Thr Gln Asp Ser Ile Thr Phe Leu Ile His Ile Trp Leu Arg His  
 35 40 45  
 Arg Asn Ser Lys Arg Ala Phe Gln Thr Gln Phe Lys Arg Trp Gly Phe  
 50 55 60  
 Pro Ser Lys Gln Asn Pro Ala His Lys Asn Ala Glu Leu Val Ala Arg  
 65 70 75 80  
 Ile Lys Gln Leu Trp Glu Arg Asn Thr Ser Gln Arg Asp Met Leu Arg  
 85 90 95  
 Val Leu Asn Glu Glu Gly Phe Glu Ile Lys Glu Arg Glu Leu Met Arg  
 100 105 110  
 Val Arg Ala Lys Asn Arg Trp Leu Leu Arg Val Pro Asn Gly Met Lys  
 115 120 125  
 Ser Gln Ala Ala Ile Arg Pro Ser Met Gln Leu Pro Glu Asp Glu Gly  
 130 135 140  
 Leu Leu Ala Leu Gln Gln Glu Val Tyr Lys Ser Thr Glu Pro Tyr Tyr  
 145 150 155 160  
 Asp Pro Gln Asn Val Pro Ala Asp Ser Ser Val Met Gln Pro Pro Ser  
 165 170 175  
 Pro Ser Leu Ser Val Asp Val Leu Ala Lys Arg Gln Glu Arg Leu Glu  
 180 185 190  
 Arg Leu Lys Ala Glu Ser Ala Glu Arg Trp Ala Ser Arg Lys Arg Arg  
 195 200 205

## 19334

Arg Arg Thr Arg Glu Trp Ala Gly Leu Pro Ala Asp Pro Pro Gly Pro  
 210 215 220  
 Pro Arg Phe Pro Ser Glu Thr Thr Ile Asp Glu Ser Lys Lys Tyr Leu  
 225 230 235 240  
 Ser Leu Asp Asn Ser Ser Tyr Arg Gln Ile Arg Asp Gln Phe Gln Arg  
 245 250 255  
 Ile Cys Glu Glu Ala Gly Phe Ile Lys Lys Thr Val Ala Gly Pro Glu  
 260 265 270  
 Arg Trp Gln Glu Ala Lys Asn Arg Leu Ile Gln Glu Ser Glu His Leu  
 275 280 285  
 Gln Arg Val Phe Trp Glu Asp Pro Asn Arg Leu Asp Ala Lys Ser Leu  
 290 295 300  
 Ala Leu Asp Val Val Cys Thr Asp Val Thr Lys Arg Met Arg Thr Leu  
 305 310 315 320  
 Glu Arg Arg Met Thr Ile Ala Glu Ala Lys Asn Ala Leu Gly Ile Asn  
 325 330 335  
 Pro Glu Glu Ser Arg Gln Ile Arg Asn Ala Phe Tyr Asn Thr Leu Lys  
 340 345 350  
 Ala Ala His Phe Thr Ser Lys Leu Glu Ala Gly Asp Glu His Trp Lys  
 355 360 365  
 Gln Leu Lys Glu Ile Trp Ile Arg Asp Ser Glu Leu Leu Gln Arg Ile  
 370 375 380  
 Leu Ala Pro Gly Ser Ala Asp Pro Glu His Ala Thr Lys Leu Lys Ala  
 385 390 395 400  
 Leu Glu Val Leu Cys Arg Asp Val Met Lys Arg Leu Arg Asp Asp Gln  
 405 410 415  
 Thr Lys Arg Asp Pro Ser Arg Lys Lys Ser Ile Thr Arg Thr Asn Ile  
 420 425 430  
 Ser Ser Pro Asp Ala Pro Gly Thr Asn Asp Asn Ser Thr Phe Ser Ser  
 435 440 445  
 Ile Thr Asn Gly Ile Ser Thr Leu Ala Ser Gln Ala Leu Ala Ser Ala  
 450 455 460  
 Pro Met Thr Ser Gly Asp Leu Ser Asp Met Gln Ile Asp Pro Ser Leu  
 465 470 475 480  
 Leu Gln Ala Ala Asn Asp Thr Ser Phe Ala Ser Ala Thr His Asp Thr  
 485 490 495  
 Gly Asn Pro Phe Gly Tyr Val Asp Pro Ile Leu Asp Ser Thr Ser Leu  
 500 505 510  
 Gln Val Pro Ile Tyr Val Arg Ile Tyr Pro Pro Asp Gln Val His Glu  
 515 520 525  
 Glu Thr Lys Thr Ile Val Asp Lys Leu Ala Thr Lys Ser Val Thr Glu  
 530 535 540  
 Leu Arg Gln Leu Val Val Ser Arg Tyr Pro Gly Ser Ile Val Thr Lys  
 545 550 555 560  
 Ile Gln Gly Ile Asp Gln Asp Glu His Gly Asn Glu Val Thr Phe Asn  
 565 570 575  
 Ile His Asp Asp Asn Glu Leu Asp Ala Tyr Leu Thr His Val His Arg  
 580 585 590  
 Arg Arg Ala Tyr Ile Val Cys Arg Leu Ala  
 595 600

&lt;210&gt; 42935

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19335

&lt;400&gt; 42935

Lys Ala Ser Ser Val Ser Ile Tyr Asp Pro Asp Phe Ala Arg Ser Tyr  
 1 5 10 15  
 Ala Tyr Ile Leu Leu Ile Gly Thr Ile Leu Leu Lys Glu Ile Gly Gln  
 20 25 30  
 Asn Leu Lys Tyr Asp Val Phe Cys Leu Pro Ala Val Gly Phe Ile Val  
 35 40 45  
 Pro Thr Tyr Pro Gln Tyr Ile Gln Phe Ala Leu Pro Gly Gln Leu Asp  
 50 55 60  
 Arg Thr Thr Gly Leu Cys Pro Leu Cys Lys Thr Phe Pro Thr Val Gln  
 65 70 75 80  
 Ser Leu Ala Ser Pro Val Ser Ala Ala Val Pro Thr Phe His His Ala  
 85 90 95  
 Ser Arg Leu Pro  
 100

&lt;210&gt; 42936

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42936

Gln Ser Arg Ser Ile Asp Asp Arg Pro Ala Lys His Gly Leu Glu Thr  
 1 5 10 15  
 Met Asp Ile Leu Asp Ser Ser Leu Thr Ile Pro Ser Arg Asp Gln Thr  
 20 25 30  
 Asp Asp Val Asp Thr Gly Ile Tyr Asp Ser Glu Arg Pro Leu Thr Ser  
 35 40 45  
 Lys Ile Thr Lys Pro Glu Gln Arg Ile Ser His Phe Asn Gln Thr Glu  
 50 55 60  
 Leu Arg Val Ser Ile Ile Tyr Thr Arg Lys Ser  
 65 70 75

&lt;210&gt; 42937

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42937

Gly His Asp Phe Gly Pro Ser Ile Lys Glu Gly His Asn Ala Trp Val  
 1 5 10 15  
 Ile Ile Arg Ile Val Asp Val Thr Glu Tyr His Leu Trp Asp Lys Met  
 20 25 30  
 Cys Glu Leu Gly Ile Leu His Val Ser Asp Asp Lys Glu Gly Phe Leu  
 35 40 45  
 Arg Ile Ala Gln Leu Gly Arg Arg Leu Asp Trp Gln Cys Ser Ile Met  
 50 55 60  
 Ala Lys  
 65

&lt;210&gt; 42938

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42938

## 19336

Leu Phe Arg Ile Gly Cys Ile Gln Val His Tyr Trp Glu His Gly Ser  
 1 5 10 15  
 Ile Gly Gln Phe Val Val Lys Gly Pro Met Val Leu Gly His Glu Ser  
 20 25 30  
 Ser Gly Val Ile Ser Lys Val Gly Ser Ala Val Thr Gly Leu Lys Val  
 35 40 45  
 Gly Asp Arg Val Ala Met Glu Pro Gly Ile Pro Cys Arg Arg Cys Glu  
 50 55 60  
 Pro Cys Lys Ala Gly Lys Tyr Asn Leu Cys Glu Lys Met Ala Phe Ala  
 65 70 75 80  
 Ala Thr Pro Pro Tyr Asp Gly Thr Leu Ala Lys Phe Tyr Val Leu Pro  
 85 90 95  
 Glu Asp Phe Cys Tyr Lys Leu Pro Asp Asn Ile Ser Leu Gln Glu Gly  
 100 105 110  
 Ala Leu Met Glu Pro Leu Gly Val Ala Val His Ile Val Lys Gln Ala  
 115 120 125  
 Ser Val Thr Pro Gly Gln Ser Val Ile Val Phe Gly Ala Gly Pro Val  
 130 135 140  
 Gly Leu Leu Cys Cys Ala Val Ala Lys Ala Phe Gly Ala Ala Lys Ile  
 145 150 155 160  
 Ile Ala Val Asp Ile Gln Lys Ala Arg Leu Asp Phe Ala Lys Lys Tyr  
 165 170 175  
 Ala Ala Thr Ser Thr Phe Glu Pro Ala Lys Val Ser Ala Val Asp Asn  
 180 185 190  
 Ala Asp Arg Leu Arg Lys Glu Asn Asn Leu Gly Val Gly Ala Asp Val  
 195 200 205  
 Val Ile Asp Ala Ser Gly Ala Glu Pro Ser Val His Thr Gly Ile His  
 210 215 220  
 Val Leu Arg Pro Gly Gly Thr Tyr Val Gln Gly Gly Met Gly Arg Ser  
 225 230 235 240  
 Glu Ile Met Phe Pro Ile Met Ala Ala Cys Thr Lys Glu Leu Ala Ile  
 245 250 255  
 Lys Gly Ser Phe Arg Tyr Gly Ser Gly Asp Tyr Asn Leu Ala Val Gly  
 260 265 270  
 Leu Val Ala Ser Gly Lys Val Asn Val Lys Asp Leu Ile Thr Gly Val  
 275 280 285  
 Val Glu Phe His Asp Ala Glu Gln Ala Phe Lys Glu Val Lys Ala Gly  
 290 295 300  
 Lys Gly Ile Lys Thr Leu Ile Ala Gly Ile Gln Asp  
 305 310 315

&lt;210&gt; 42939

&lt;211&gt; 687

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42939

Pro Leu Asn Pro Leu Asp Leu Gly Leu Lys Asn Tyr Ile Ala Ser Glu  
 1 5 10 15  
 Asp Leu Ser Ile Gly Thr Ser Ala Gly Leu Val Arg Arg Val Phe Lys  
 20 25 30  
 Arg Ser Val Glu Leu Gly Arg Arg Tyr Ala Arg Ser Arg Asn Asp Asp  
 35 40 45  
 Glu Leu His Glu Ala Leu Arg Leu Leu Gly Thr Gly Leu His Cys Leu  
 50 55 60  
 Glu Asp Tyr Ala Ala His Ser Asn Tyr Thr Glu Leu Ser Leu Ile Glu



## 19337

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Gly | Glu | Ser | Thr | Val | Phe | Pro | His | Val | Gly | Arg | Asn | Thr | Lys | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys | Val | Asp | Gly | Ala | Gln | Asp | Tyr | Ile | Tyr | Pro | Ile | Val | Thr | Gly | Thr |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Gly | Gly | Val | Asp | Phe | Phe | His | Ser | Val | Leu | Gly | Glu | Leu | Ser | Asp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Thr | Ile | Gln | Ser | Glu | Val | Gln | Ser | Leu | Glu | Gly | Val | Ile | Asn | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Gln | Ser | Gly | Thr | Pro | Thr | Glu | Ser | Leu | Ile | Gln | Asp | Leu | Leu | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Lys | Ile | Pro | Glu | Gly | Leu | Ile | Gly | Asn | Ser | Asp | Asp | Gln | Ala | Asn | Lys |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Met | Asp | Glu | Phe | Lys | Ala | Lys | Ser | Gln | Asn | Ala | Lys | Gln | Gln | Asn | Gln |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Glu | Ile | Ser | Pro | Arg | Glu | Pro | Glu | Glu | Trp | Thr | Arg | Tyr | Leu | Asp | Asn |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Val | His | Gln | Gln | Ile | Tyr | Pro | Val | Leu | Glu | Trp | His | Asp | Glu | Leu | Ile |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Lys | Ser | Ile | Asn | Arg | Ala | Ile | Glu | Glu | Ile | Pro | Val | Leu | Pro | Glu | Leu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ile | Glu | Gln | Phe | Gln | Glu | Gln | Ile | Asn | Ile | Phe | Val | Phe | Ser | Ile | Leu |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |     |
| Ala | Pro | Tyr | Ile | Leu | Pro | Ile | Ile | Arg | Gln | Val | Lys | Val | Glu | Leu | Gln |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Thr | Gly | Ser | Ser | Glu | Val | Ile | Glu | Ser | Ser | Arg | Ala | Gln | Gln | His | Val |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Val | Phe | Asn | Asp | Asp | Asp | Ser | Ser | Asn | Pro | Thr | His | Ser | Met | Leu | Ser |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Lys | Asp | His | Phe | Ser | Asn | Val | Leu | Asn | Glu | Pro | Ala | Gly | Gln | Ile | Ala |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Ser | Arg | Val | Val | Lys | Trp | Thr | Val | Pro | Gln | Leu | Met | Glu | Cys | Trp | Asp |
|     |     |     | 325 |     |     |     |     | 330 |     |     |     |     |     | 335 |     |
| Asp | Glu | Asn | Ile | Asp | Val | Asp | Arg | Val | Leu | Asp | Arg | Ile | Ile | Thr | Gly |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Val | Phe | His | Pro | Ala | Leu | Arg | Gln | Tyr | Gly | Glu | Asp | Gly | Ala | Ser |     |
|     | 355 |     |     |     |     | 360 |     |     |     |     |     | 365 |     |     |     |
| Asp | Ile | Arg | Gln | Ile | Met | Phe | Asp | Thr | Val | Glu | Glu | Trp | Trp | Gly | Lys |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Lys | Asp | Glu | Ala | Glu | Arg | Glu | Ser | Leu | Arg | Glu | Gln | Leu | Ser | Arg | Glu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Gly | Val | Arg | Glu | Gly | Lys | Asn | His | Lys | Glu | Gly | Val | His | Asp | Ser | Gly |
|     |     |     | 405 |     |     |     |     | 410 |     |     |     |     |     | 415 |     |
| His | Gly | Cys | Gly | Lys | Pro | Leu | Thr | Leu | His | Lys | Ala | Lys | Thr | Ser | Pro |
|     |     | 420 |     |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Gly | Glu | Ser | Tyr | Lys | Pro | Ser | Thr | Ser | Gly | Leu | Gly | Lys | Ile | Ala | Ala |
|     | 435 |     |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Glu | Ala | Ala | Gly | Gly | Gly | Ala | Leu | Gly | Ser | Leu | Val | Gly | Gly | Leu | Val |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Ser | Gly | Val | Gly | Ser | Ile | Leu | Leu | Ser | Asp | Ser | Ser | Ser | Arg | Arg | Ser |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Asp | Asn | Glu | Arg | Arg | Glu | Thr | Asp | Phe | Gln | Glu | Asp | Gly | Leu | Pro | Gly |
|     |     |     | 485 |     |     |     |     | 490 |     |     |     |     |     | 495 |     |
| Gln | Ser | Arg | Arg | Gln | Tyr | Gly | Gly | Gln | Ser | Gly | Phe | Lys | Thr | Glu | Ala |
|     |     | 500 |     |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Asp | Gly | Glu | Val | Arg | Tyr | Ser | Gly | Glu | Ser | Arg | Tyr | Glu | Arg | Glu | Ser |

## 19338

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      515              520              525
Arg  Gln Gly Trp Asn Glu Gly Arg Ser Arg Asp Asp Asp Asp Pro Thr
530              535              540
Tyr  Glu Asn Thr Ser Ser Tyr Ser Arg Gly Glu Gly Glu Asn Asp His
545              550              555              560
Glu  Arg Arg Glu Trp Ser Gln Asp Cys Gln Arg His Gly Pro Arg Gly
      565              570              575
Gly  Arg Gln Asn Tyr Glu Asp Ala His Ala Asn Leu Tyr Arg Arg Ser
      580              585              590
Asp  Leu Glu Ser Tyr Glu Thr Ser Glu Arg Tyr Leu Ser Val Glu Asn
      595              600              605
Arg  Arg Val Val Glu Tyr Gly Arg Asp Arg Pro Asp Tyr Asp Gly Ser
      610              615              620
Glu  Ser Leu Trp Ser Gln Lys Thr Gln Ala Gly Tyr Glu Arg Ala Asp
625              630              635              640
Asp  Asp Arg Ile Asp Tyr Thr Asn Ser Arg Tyr Asp Tyr Asp Ser Gly
      645              650              655
Arg  Ser Thr Tyr Asp Thr Glu Gln Thr Gly Pro Tyr Glu His Ser Arg
      660              665              670
Pro  Glu Arg Leu Val Lys His Thr Ser Gly Asp Phe Gly Arg Arg
      675              680              685

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<210> 42940  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

```

<400> 42940
Ala  Lys Gly Ile Gln Arg His Phe Tyr Leu His Arg Val Asn Val Gly
1              5              10              15
Ile  Lys Ser Ser His Thr Ala Arg Leu Ile Thr Tyr Pro Pro His Ser
      20              25              30
Val  His Arg Gly Phe Pro Asn Leu Met Leu Lys Ile Val Pro Leu Asp
      35              40              45
Glu  Ala Asn Pro Val Phe Ala Ser Asp Cys Ala Phe His Phe Asn Cys
      50              55              60
Ser  Leu Asp His Ser Val His Asn Thr Phe Arg Asn Phe Leu Phe Ile
65              70              75              80
Leu  Ile Glu Gln Asp Asn Cys
      85

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<210> 42941  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

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<400> 42941
Asn  Leu Ser Phe Val Leu Glu Gly Ile His Gln Val Lys Phe Glu Asp
1              5              10              15
Arg  Pro Ile Pro Glu Leu Lys Asp Pro His Asp Val Leu Val Asn Val
      20              25              30
Lys  Phe Thr Gly Ile Cys Gly Ser Asp Val Arg Ile Cys Ala Phe Ser
      35              40              45
Leu  Thr Leu Tyr Ile His Leu Pro Cys Gly Ala Val Asp Gln Ala Asp
      50              55              60
Cys  Phe Gly Ser Val Ala Phe Arg Ser Thr Ile Gly Ser Met Val Gln

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<210> 42942
<211> 573
<212> PRT
<213> A.fumigatus
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 42942 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Gln         | Asp | Ser | Gly | Asn | Tyr | Ile | Ile | Ser | Gly | Gly | Asp | Glu | Ser | Val | Met |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Val         | Leu | Trp | Gln | Leu | Asp | Thr | Gly | Arg | Lys | Gln | Phe | Leu | Pro | His | Leu |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Ser         | Ser | Pro | Ile | Cys | Asn | Leu | Val | Val | Ser | Thr | Thr | Gly | Lys | Ala | Tyr |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Ile         | Val | Lys | Leu | Ala | Asp | Asn | Cys | Ile | Met | Val | Leu | Ser | Ala | Thr | Glu |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Leu         | Gln | Pro | Tyr | Val | Thr | Ile | Thr | Gly | Leu | Gln | Leu | Cys | His | Gln | Val |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Asn         | Lys | Pro | Ala | Asp | Ala | Ala | Met | Pro | Glu | Ser | Arg | Val | Ala | Leu | Gln |  |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Pro         | Pro | Ala | Ala | Val | Leu | His | Pro | Gln | Phe | His | Asp | Arg | Leu | Leu | Val |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Ala         | Val | Pro | Ala | Ser | Arg | Gln | Ser | Ala | Arg | Asn | Tyr | His | Ser | Thr | Thr |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Ser         | Ser | Cys | Met | Leu | Gln | Thr | Tyr | Asp | Ile | Arg | Thr | Asn | Ser | Gln | Ile |  |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Ser         | Arg | Gln | Ala | Leu | Ala | Arg | Thr | Asn | Ala | Thr | Thr | Leu | Arg | Ile | Ser |  |
| 145         |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     | 160 |  |
| Pro         | Glu | Gly | Thr | Glu | Ile | Val | Thr | Pro | Asn | Val | Ser | His | Leu | Gly | Ile |  |
|             |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |
| Cys         | Gln | Asp | Gly | Lys | Trp | Met | Ala | Thr | Ile | Asp | Asp | Trp | Ile | Pro | Arg |  |
|             |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |
| Pro         | Glu | Asp | Ile | Arg | Ala | Leu | Asp | Ser | Thr | Ser | Ala | Ser | Ser | Gly | Ser |  |
|             |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |
| His         | Thr | Leu | His | Arg | Glu | Thr | Tyr | Leu | Lys | Phe | Trp | Arg | Trp | Asp | Glu |  |
|             | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |
| Val         | Ser | Asn | Thr | Trp | Glu | Leu | Thr | Thr | Arg | Ile | Asn | Ser | Pro | His | Ser |  |
| 225         |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |
| Phe         | Asn | Ser | Val | Ser | Val | Pro | Ile | Leu | Asp | Leu | Ala | Ser | Arg | Pro | Tyr |  |
|             |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |
| Ser         | His | Glu | Phe | Ala | Thr | Val | Gly | Cys | Asp | Ala | Val | Leu | Arg | Phe | Trp |  |
|             |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |
| Cys         | Ala | Ser | Asn | Arg | Pro | Cys | Leu | Gly | Ser | Ala | Thr | Glu | Arg | Ser | Glu |  |
|             |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |
| Asn         | Arg | Tyr | Gln | Thr | Trp | Lys | Cys | Arg | Gly | Thr | Ile | Asp | Leu | Lys | Cys |  |
|             | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |
| Ala         | Phe | Ile | Gly | Gly | Gly | Thr | Glu | Pro | Ala | Asn | Ala | Ala | Cys | Ile | Gly |  |
| 305         |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |  |
| Phe         | Ser | Glu | Asp | Gly | Ser | Val | Leu |     |     |     |     |     |     |     |     |  |

## 19340

Lys Phe Leu Gly Arg Tyr Leu Val Ile Leu Ser Leu His Ser Thr His  
 370 375 380  
 Ile Trp Asp Thr Val Gly Asp Ile Val Arg Thr Ile Asn Ser Ser Gly  
 385 390 395 400  
 Ile Gln Asp Asn Thr Pro Cys Asp Asp Gln Leu Leu Ala Val Ser Ser  
 405 410 415  
 Lys Ser Gln Thr Cys Ala Val Ala Ser Arg Val Pro Arg His Leu Ala  
 420 425 430  
 Gly Thr Arg Arg Ser Ser Gly Ser Leu Phe Asp Ile Arg Val Tyr Asp  
 435 440 445  
 Val Gln Thr Leu Ser Leu Leu Thr Arg Gln Ser Leu Lys His Cys Pro  
 450 455 460  
 Val Ser Leu Leu Ser Asp Pro Leu Thr Gly Asp Tyr Ile Val Val Asp  
 465 470 475 480  
 Ala Arg Ala Asn Val Leu Arg Leu Ser Cys Ser Asp Lys Ala Pro Gln  
 485 490 495  
 Ser Val Pro Gln Ser Lys Asp Gly Ile Ser Cys Asn Tyr Gly Leu Gly  
 500 505 510  
 Gly Leu Phe Gly Thr Arg Ser Arg Ala Met Ser Arg His Asp Asn Leu  
 515 520 525  
 Gln Pro Leu Pro Val Asn Gly Ser Ser Ser Ala Pro Gln Pro Phe Gly  
 530 535 540  
 Leu Pro Gly Val Phe Thr Asp Thr Pro Pro Phe Val Leu Pro Pro Thr  
 545 550 555 560  
 Ser Val Leu Phe Lys Asn Leu Val Gln Asn Leu Thr Thr  
 565 570

&lt;210&gt; 42943

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42943

Ser Ile Ser Ile Pro Pro Ser Phe Leu Leu Cys Phe Val Arg Ala Leu  
 1 5 10 15  
 Ser His Thr Phe Ser Phe Leu Ser Ser His Pro Tyr Thr Glu Arg Ile  
 20 25 30  
 Tyr Tyr Leu Ile Cys Leu Trp Val Ala Ile Asn Cys Gln Pro Leu Leu  
 35 40 45  
 His Pro Pro Leu Ile Pro Gln Lys Phe Pro Leu Thr Leu Arg Pro Lys  
 50 55 60  
 Gly Arg Lys Asn Val Met Ala Ala Ala Pro Leu Asp Ser Ser Ser Thr  
 65 70 75 80  
 Pro Pro Asp Ala Pro Gln Ser Thr Asp Ser Thr Arg Pro His Gly Asp  
 85 90 95  
 Phe Met Glu Asp Leu Asp Pro Gln Cys Thr Arg Lys Arg Pro Arg Leu  
 100 105 110  
 Asp Ser Gly Ser Gly Ala Val Glu Ser Leu Ser Ile Asp Glu Ala Ala  
 115 120 125  
 Ile Ser Arg Met Ser Glu Ser Thr Pro Ala Ala Pro Ala Thr Pro Gly  
 130 135 140  
 Thr Thr Asp His Asp Val Pro Val Ser Ala Ala Pro Ala Ser Arg Val  
 145 150 155 160  
 Thr Ile Asn Val Lys Ser Pro Thr Ser Asp Thr Met Ala Thr Asp Ser  
 165 170 175  
 Leu Asn Pro Thr Ser Glu His Pro Gly Ala Gly Pro Pro Asn Ala Thr

# 19341

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 180 |     | 185 |     | 190 |
| Pro | Ala | Ala | Asp | Ser | Pro |
|     | 195 |     | 200 |     | 205 |
| Gln | Ser | Pro | Glu | Ile | Glu |
|     | 210 |     | 215 |     | 220 |
| Pro | Asn | Thr | Ser | Thr | Trp |
|     | 225 |     | 230 |     | 235 |
| Val | Thr | Pro | Glu | Val | Val |
|     |     |     | 245 |     | 250 |
| Ser | Phe | Pro | Lys | Leu | Arg |
|     |     |     | 260 |     | 265 |
| Gly | Ile | Ser | Ala | Ile | Ile |
|     |     |     | 275 |     | 280 |
| Leu | Gly | Ala | Cys | Leu | Lys |
|     |     |     | 290 |     | 295 |
| Arg | Lys | Arg | Pro | Arg | Cys |
|     |     |     | 305 |     | 310 |
| Arg |     |     |     |     |     |

<210> 42944  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

|   |
|---|
| <400> 42944   |
| Leu Asn Gln Met Leu Ser Phe Arg Pro Leu Leu Thr Pro Ser Ser Ser |
| 1 5 10 15   |
| Asp Leu Ala Glu Lys Leu Ile Asp Asn Tyr Leu Phe Pro Asn Leu Ser |
| 20 25 30  |
| Glu Glu Ser Asp Asn Leu Ile Val Pro Gln Ile Pro Val Met His Ala |
| 35 40 45  |
| Gln Thr Arg Gln Glu Leu Tyr Gly Ile Leu Ser Leu Leu Cys Lys Asn |
| 50 55 60  |
| Ser Asp Asp Tyr Cys Thr Val Leu Asp Cys Val Lys Glu Leu Ile Pro |
| 65 70 75 80   |
| Ala Gly Thr Thr Phe Leu Phe Leu Ala Ser Ala Ala Trp Leu Phe     |
| 85 90 95  |

<210> 42945  
 <211> 231  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (209), (210)  
 <223> Identity of amino acid sequences at the above locations are unknown.

|   |
|---|
| <400> 42945   |
| Leu Ala Pro Arg Ser Asp Lys Glu Lys Thr Ile Glu Gly Asp Leu Phe |
| 1 5 10 15   |
| Thr Ala Phe Val Ala Ala Gly Ala Ile Ser Lys Ala Asn Ala Ala Asp |
| 20 25 30  |
| Pro Lys Lys Ser Ser Leu Val Arg Cys Ala Arg Thr Asp Lys Gly Val |
| 35 40 45  |

## 19342

His Ala Ala Gly Asn Val Val Ser Leu Lys Leu Ile Ile Glu Asp Pro  
 50 55 60  
 Asp Leu Ile Lys Lys Ile Asn Glu Lys Leu Cys Pro Gln Ile Arg Val  
 65 70 75 80  
 Trp Asp Ile Gln Val Thr Asn Lys Gly Phe Ser Cys Tyr Gln Met Cys  
 85 90 95  
 Asp Ser Arg Val Tyr Glu Tyr Leu Ile Pro Ser Tyr Cys Phe Leu Pro  
 100 105 110  
 Pro His Pro Ser Thr Tyr Leu Gly Arg Lys Ile Val Glu Leu Ala Glu  
 115 120 125  
 Lys Asp Arg Asp Leu Glu Ala Tyr Arg Ala Arg Gln Glu Glu Val Ala  
 130 135 140  
 Thr Tyr Trp Glu Asp Val Asp Asn Glu Arg Ile Lys Pro Ile Leu Asp  
 145 150 155 160  
 Thr Phe Pro Glu Asp Leu Arg Lys Leu Val Glu Lys Ala Leu Tyr Phe  
 165 170 175  
 Asp Glu Glu Arg Ala Pro Glu Asp Glu Asp Ala Thr Gln Lys Lys Glu  
 180 185 190  
 Pro Gln Gln Thr Ser Ser Lys Gly Asn Pro Ala Asp Ser Glu Gln Thr  
 195 200 205  
 Xaa Xaa Asp Leu Thr Thr Asp Ala Ser Tyr Glu Glu Asp Ala Arg Lys  
 210 215 220  
 Thr Arg Ile Ser Glu Gly Gly  
 225 230

&lt;210&gt; 42946

&lt;211&gt; 723

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42946

His Ser Thr Val Ala Gln Leu Thr Leu Ser Cys Arg Tyr Arg Ala Cys  
 1 5 10 15  
 Leu Lys Glu Val Pro Asp Asn Leu Ile Phe His Leu Lys Arg Phe Asp  
 20 25 30  
 Phe Asp Met Ile Thr Met Met Arg Ser Lys Ile Asn Asp Glu Phe Arg  
 35 40 45  
 Phe Pro Glu His Ile Asp Met Ser Pro Phe Lys Val Glu Tyr Leu Ser  
 50 55 60  
 Asp Gln Asn Ser Asn Val Pro Glu Asp Val Phe Lys Leu Val Gly Val  
 65 70 75 80  
 Leu Val His Ser Gly Thr Ala Glu Ser Gly His Tyr Tyr Ser Tyr Ile  
 85 90 95  
 Arg Glu Arg Pro Asn Ala Gly Gly Arg Gly Ser Trp Val Glu Phe Asn  
 100 105 110  
 Asp Ser Asp Val Ser Arg Phe Asp Pro Ser Lys Ile Ala Asp Gln Cys  
 115 120 125  
 Phe Gly Gly Tyr Asn Asp Ser Val His Pro Ala Asn Val Asn Gln Val  
 130 135 140  
 Arg Phe Asn Lys Val Trp Asn Ala Tyr Met Leu Phe Tyr Gln Arg Ile  
 145 150 155 160  
 Ser Ser Met Glu Ser Glu Lys Leu Leu Tyr Lys Pro Ser Lys Ala Asp  
 165 170 175  
 His Pro Val His Val Ser Leu Pro Ile Pro Leu Ser Asn His Ile Ala  
 180 185 190  
 Met Glu Asn Glu Ile Phe Ile Arg Thr Tyr Cys Leu Met Asp Pro Tyr

|                         |                     |                     |
|-------------------------|---------------------|---------------------|
| 195                     | 200                 | 205                 |
| His Ala Leu Phe Val Arg | His Leu Leu Ser Arg | Leu His Asp Asn Gly |
| 210                     | 215                 | 220                 |
| Ile Thr Asn Lys Arg Pro | Lys Leu Asp Gln Asp | Met Val Phe Ile Ala |
| 225                     | 230                 | 235                 |
| Leu Asp Thr Leu Glu Gln | Leu Ile Ala Arg Thr | Arg Glu Pro Leu Gly |
| 245                     | 250                 | 255                 |
| Leu Asp Val Leu Val Ser | Glu Leu Val Gly Val | Ile Asn Glu Leu Pro |
| 260                     | 265                 | 270                 |
| Lys Gly Ala His Arg Val | Leu Glu Trp Val Val | Glu Arg Ser Ala Gly |
| 275                     | 280                 | 285                 |
| Ile Arg Asn Leu Val Leu | Arg Ser Pro His Ala | Ser Val Arg Asp Ser |
| 290                     | 295                 | 300                 |
| Thr Ile Lys Val Ile Met | Arg Ala Leu Glu Arg | Leu Gln Glu Leu Arg |
| 305                     | 310                 | 315                 |
| Asp Glu Ala His Leu Asp | Glu Arg Ala Lys Glu | Lys Trp His Met Arg |
| 325                     | 330                 | 335                 |
| Tyr Leu Asp Gly Phe Glu | Asn Val Val Ala Thr | Leu Asp Gly Leu Trp |
| 340                     | 345                 | 350                 |
| Pro Val Leu His Thr Thr | Ser Arg Ser Trp Asp | Asp Tyr Phe Thr Phe |
| 355                     | 360                 | 365                 |
| Leu Ile Ser Leu Ala Lys | Leu Gly Ser Tyr Glu | Thr Glu Met Ile Leu |
| 370                     | 375                 | 380                 |
| Asn Ser Gly Phe Leu Leu | Lys Cys Leu Glu Ile | Val Trp Leu Asp Gly |
| 385                     | 390                 | 395                 |
| Glu Asp Ser Lys Arg Leu | Lys Arg Gln Tyr Leu | Ser Tyr Cys Arg Leu |
| 405                     | 410                 | 415                 |
| Val Glu Lys Gly Arg Lys | Phe Ser His Arg Arg | Leu Met Asp Leu Leu |
| 420                     | 425                 | 430                 |
| Ala Phe Leu Leu Thr Lys | Val Asp Leu Thr Val | Ala Pro Thr Ser Asp |
| 435                     | 440                 | 445                 |
| Asp Glu Arg Arg Ser Leu | Pro Asn Gly Lys Phe | Ser Leu Thr Ile Thr |
| 450                     | 455                 | 460                 |
| Glu Asn Val Phe Val Arg | Ser Leu Gly Arg Asp | Arg Glu Leu Ser Leu |
| 465                     | 470                 | 475                 |
| Leu Lys Lys Ile Leu His | Thr Asn His Asn Pro | His Ala Ser Met Ala |
| 485                     | 490                 | 495                 |
| Ile Val Glu Leu Leu Leu | Asp Ser Glu Pro Glu | Ala Gly Leu Met Asp |
| 500                     | 505                 | 510                 |
| Pro Leu Cys Lys Val Leu | Glu Asp Gly Leu Arg | Val Glu Pro Ala Glu |
| 515                     | 520                 | 525                 |
| Leu Cys Ala Pro Phe Leu | Glu Ala Thr Leu Ile | Leu Cys Gln Arg Ser |
| 530                     | 535                 | 540                 |
| Pro Asp Glu Asn Arg Phe | Val Ala Leu Ile Asp | Phe Val Ala Lys Gly |
| 545                     | 550                 | 555                 |
| Ile Glu Ser Phe Asn Asp | Ser Gly Gly Arg Glu | His Leu Ala Phe Phe |
| 565                     | 570                 | 575                 |
| Thr Ser Leu Leu Thr Ser | Arg Asn Glu Arg Leu | Gly Leu Glu Lys Asn |
| 580                     | 585                 | 590                 |
| Trp Phe Leu Ala Gln Ile | Val Asp Lys Ile Pro | Asp Trp Ala Pro Thr |
| 595                     | 600                 | 605                 |
| Leu Leu Ile Phe Pro Asp | Arg Thr Val Arg Asn | Thr Thr Leu Ala Leu |
| 610                     | 615                 | 620                 |
| Leu His Gln Ile Leu Phe | Ser Val Glu Ala Glu | Asp Met Gly Pro Asp |
| 625                     | 630                 | 635                 |
| Trp Gln Ser Arg His Ala | Glu Ile Val Lys Glu | Leu Val Arg Asn Ser |

[illegible]

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<210> 42947
<211> 198
<212> PRT
<213> A.fumigatus
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<210> 42948
<211> 946
<212> PRT
<213> A.fumigatus
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<400> 42948
Arg Leu Phe Thr His Tyr Arg Gln Pro Leu Glu Pro Asp Asp Gly Gln
1          5          10          15
Gly Ile Trp Cys Cys Leu Glu Glu Phe Leu Ile Asn Phe Thr Leu Leu
          20          25          30
Gly Phe Arg Leu Val Arg Leu Asp Ile Leu Thr Leu Lys Gln Leu Glu

```



|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Lys Asn Thr Asp Met Gln Ala Val Asp Leu Met Ser Arg Ala Tyr Leu |     |     |
| 50  | 55  | 60  |
| Gln Ala Leu Gly Trp Ile Leu Gln Leu His Gly Ile Pro Phe Tyr Arg |     |     |
| 65  | 70  | 75  |
| Ala Met Glu Arg Ala His Gly Ser Glu Ile Val Asp Leu Val Val Gln |     |     |
| 85  | 90  | 95  |
| Leu Asn Ser Arg Val Ala Phe Leu Pro Ile Gly Thr Met His Leu Leu |     |     |
| 100   | 105 | 110 |
| Ser Glu Tyr Ala Ala Cys Leu Leu Ala Leu Val Ser Arg Pro Gln Trp |     |     |
| 115   | 120 | 125 |
| Ser Gln Leu Ser Ser Ser Leu Val His Thr Leu Thr Ile Val His Asn |     |     |
| 130   | 135 | 140 |
| Ile Met Asp Ser Gly Val Glu Gln Trp Lys Ile Arg Glu Glu Glu Ser |     |     |
| 145   | 150 | 155 |
| Ile Ala Glu Ser Ala Ser Phe Pro Phe Leu Lys Gln Val Tyr Gln     |     |     |
| 165   | 170 | 175 |
| Phe Ala Arg Asp Ile Asp Gly Gln Tyr Gln Ala His Ile Ala Lys Lys |     |     |
| 180   | 185 | 190 |
| Leu Pro Trp Val Thr Ser Asp Ala Ser Glu Ser Ile Leu Arg Cys Ile |     |     |
| 195   | 200 | 205 |
| Ser Gly Ile Tyr Leu Ala Val Ser Arg Asp Ser Ser Phe Thr Ser Gln |     |     |
| 210   | 215 | 220 |
| Val Ala Glu Asp Leu Leu Ile Glu Leu Pro Glu Gln Ser Ser Gln Asp |     |     |
| 225   | 230 | 235 |
| Glu Arg Ala Trp Ile Ile Tyr Tyr Ala Trp Arg Phe Ala Val Leu Gln |     |     |
| 245   | 250 | 255 |
| Lys His Ile Lys Asp Gly Arg Met Glu Leu Arg Val His Gly Ile Glu |     |     |
| 260   | 265 | 270 |
| Thr Met Gln Ala Asp Leu Val Asn Val Trp Arg Gln Tyr Ile Gln Pro |     |     |
| 275   | 280 | 285 |
| Asn Pro Thr Gly Thr Glu His Pro Leu Val Arg Phe Leu Val Gly Phe |     |     |
| 290   | 295 | 300 |
| Leu Arg Glu Asn Lys Ile Val Asp Tyr Ile Val Gly Val Asp Ser His |     |     |
| 305   | 310 | 315 |
| Pro Gln Leu Ile Ser Arg Ser Gly Asn Val Val Gly Phe Leu Ile Val |     |     |
| 325   | 330 | 335 |
| Thr Ser Thr Tyr Gly Asp Leu Asp Thr Asp Thr Val Trp Lys Thr Val |     |     |
| 340   | 345 | 350 |
| Thr Glu Ser Gln Asp Pro Arg Thr Val Ser Glu Val Leu Gly Met Leu |     |     |
| 355   | 360 | 365 |
| Thr Arg Thr Phe His Met His Ser Pro Leu Ser Ser Ala Leu Ile Tyr |     |     |
| 370   | 375 | 380 |
| Leu Cys Ser Lys Leu Leu Glu Leu Pro Leu Ser Arg Phe Asp Ala Arg |     |     |
| 385   | 390 | 395 |
| Met Val Glu Phe Cys Glu Gln Leu Leu Tyr Gln Val Arg Glu Lys Gln |     |     |
| 405   | 410 | 415 |
| Gly Glu Arg Asn Arg His Asp Leu Leu Asp Ala Ser His Val Asp Ala |     |     |
| 420   | 425 | 430 |
| Val Pro Leu Arg Leu Cys Val Arg Leu Ile Arg Glu Ser Ala Ala Phe |     |     |
| 435   | 440 | 445 |
| Glu Glu Phe Ser Val Glu His Lys Ala Phe Leu Gln Arg Phe Ala Ser |     |     |
| 450   | 455 | 460 |
| Ser Gln Leu Ser Ser Leu Ile Ser Val Gly Leu Ser Glu Ser Asp Lys |     |     |
| 465   | 470 | 475 |
| Met Glu Thr Tyr Glu Arg Cys Ile Gln Asp Ile Ala Glu Met Asn Gln |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |  |  |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|--|--|-----|--|--|
|     |     |     |     |     |     |     |     |     |     |     |     |     | 485 |     |     |  |     |     | 490 |  |     |     |  |  | 495 |  |  |
| Phe | Thr | Val | Gly | Ser | Ile | Gln | Ala | Leu | Asn | Ala | Leu | Leu | Pro | Val | Tyr |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 500 |     |     |  | 505 |     |     |  | 510 |     |  |  |     |  |  |
| Asp | Thr | Gln | Glu | Ile | Arg | Lys | Leu | Ala | Thr | Asp | Phe | Asn | Leu | Ser | Ala |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 515 |     |     |  | 520 |     |     |  | 525 |     |  |  |     |  |  |
| Leu | Val | Ile | Ala | Glu | Met | Val | His | Thr | Val | Asp | Leu | Lys | Gln | Thr | Asp |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 530 |     |     |  | 535 |     |     |  | 540 |     |  |  |     |  |  |
| Phe | Ala | Asp | Ser | Phe | Ser | Lys | Thr | Gly | Phe | Ile | Ser | Arg | Ile | Gln | Leu |  |     |     |     |  |     |     |  |  |     |  |  |
| 545 |     |     |     |     |     |     |     |     |     |     |     |     |     | 550 |     |  |     | 555 |     |  |     | 560 |  |  |     |  |  |
| Leu | Ala | Arg | Ile | Ile | Asp | Lys | Val | Pro | Asp | Ser | Val | Thr | Ala | Asp | Leu |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 565 |     |     |  | 570 |     |     |  | 575 |     |  |  |     |  |  |
| Ala | Asp | Val | Leu | Trp | Glu | Lys | Val | Leu | Val | Ser | Gln | Thr | Leu | Val | Glu |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 580 |     |     |  | 585 |     |     |  | 590 |     |  |  |     |  |  |
| Gln | Gly | Arg | Arg | Ala | Val | Trp | Asp | Met | Leu | Cys | Glu | Leu | Met | Arg | Arg |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 595 |     |     |  | 600 |     |     |  | 605 |     |  |  |     |  |  |
| Ser | Pro | Lys | Arg | Asn | Pro | Phe | Ile | Glu | Arg | Cys | Ile | Gln | Glu | Tyr | Leu |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 610 |     |     |  | 615 |     |     |  | 620 |     |  |  |     |  |  |
| Pro | Lys | Leu | Ser | Pro | Asn | Asp | Tyr | Ser | Pro | Glu | Leu | Leu | Ala | Phe | Ala |  |     |     |     |  |     |     |  |  |     |  |  |
| 625 |     |     |     |     |     |     |     |     |     |     |     |     |     | 630 |     |  |     | 635 |     |  |     | 640 |  |  |     |  |  |
| Lys | Gln | Ala | Val | Asn | Tyr | Glu | Val | Arg | Phe | Asn | Pro | Pro | Pro | Ile | Ala |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 645 |     |     |  | 650 |     |     |  | 655 |     |  |  |     |  |  |
| Lys | Glu | Asp | Glu | Val | Val | Ser | Ile | Pro | Gly | Leu | Asp | Arg | Ile | Trp | Asn |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 660 |     |     |  | 665 |     |     |  | 670 |     |  |  |     |  |  |
| Phe | Ile | Leu | Thr | Ala | Pro | Pro | Gly | Ser | Ile | Glu | Thr | Asp | Ala | Ile | Asn |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 675 |     |     |  | 680 |     |     |  | 685 |     |  |  |     |  |  |
| Phe | Ala | Ile | Glu | Val | Tyr | Leu | Asp | His | Ser | Val | Ile | Asn | Arg | Ser | Pro |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 690 |     |     |  | 695 |     |     |  | 700 |     |  |  |     |  |  |
| Arg | Ser | Ala | Val | Glu | Ala | Thr | His | Ile | Ala | Leu | Val | Asp | Arg | Cys | Val |  |     |     |     |  |     |     |  |  |     |  |  |
| 705 |     |     |     |     |     |     |     |     |     |     |     |     |     | 710 |     |  |     | 715 |     |  |     | 720 |  |  |     |  |  |
| Glu | Gln | Leu | Lys | Ser | Ala | Ala | Ala | His | Leu | Lys | Pro | Ala | Ile | Gly | Ser |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 725 |     |     |  | 730 |     |     |  | 735 |     |  |  |     |  |  |
| Val | Ala | Asn | Gly | Thr | Asp | Glu | Ser | Met | Ala | Ser | Asp | Leu | Ser | Arg | Gly |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 740 |     |     |  | 745 |     |     |  | 750 |     |  |  |     |  |  |
| Glu | Ser | Arg | Ala | Asp | Ala | Leu | Arg | Phe | Ser | Arg | Ser | Leu | Leu | Phe | Leu |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 755 |     |     |  | 760 |     |     |  | 765 |     |  |  |     |  |  |
| Arg | Gln | Phe | Leu | Gln | Gly | Leu | Arg | Ser | Arg | Pro | Gln | Tyr | Ser | Pro | Pro |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 770 |     |     |  | 775 |     |     |  | 780 |     |  |  |     |  |  |
| Gln | Asn | Ser | Leu | Pro | Asn | Leu | Pro | Asp | His | Pro | Val | Lys | Gly | Glu | Leu |  |     |     |     |  |     |     |  |  |     |  |  |
| 785 |     |     |     |     |     |     |     |     |     |     |     |     |     | 790 |     |  |     | 795 |     |  |     | 800 |  |  |     |  |  |
| Ile | Glu | Ile | Arg | Tyr | Gln | Thr | Phe | Asn | Gly | Ser | Ser | Gln | Ser | Lys | Phe |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 805 |     |     |  | 810 |     |     |  | 815 |     |  |  |     |  |  |
| Arg | Ser | Leu | Arg | Ile | Gly | Asp | Leu | Ala | Thr | Ala | Ala | Glu | Leu | Val | Glu |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 820 |     |     |  | 825 |     |     |  | 830 |     |  |  |     |  |  |
| Lys | Leu | Glu | Gln | Leu | Thr | Gly | Phe | Ser | Lys | Phe | Ser | Thr | Ile | Thr | Gly |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 835 |     |     |  | 840 |     |     |  | 845 |     |  |  |     |  |  |
| Gly | Arg | Arg | Leu | Asp | Leu | Leu | Glu | Lys | Pro | Asn | Leu | Thr | Ile | Arg | Asp |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     | 850 |     |     |  | 855 |     |     |  | 860 |     |  |  |     |  |  |
| Leu | Lys | Ile | Gly | Ser | Gly | Leu | Leu | Leu | Ile | Arg | Lys | Asn | Ala | Asp | Ser |  |     |     |     |  |     |     |  |  |     |  |  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |  |  |     |  |  |

## 19347

930  
Asp Leu  
945

935

940

<210> 42949  
<211> 232  
<212> PRT  
<213> A.fumigatus

<400> 42949  
Arg Ala Asp Pro Cys Arg Tyr Asn Phe Pro Val Pro Ser Lys Cys Gly  
1 5 10 15  
Val Ala Ile Leu Ile Leu Ile Asn Cys Cys Asp Leu Ala Asp Tyr Thr  
20 25 30  
Tyr Ser Ser Ser Trp Cys Phe Asp Arg His Lys Met Ile Arg Ala Pro  
35 40 45  
Glu Gly Tyr Ala Gly Leu Lys Asn Leu Ser Asn Thr Cys Tyr Leu Asn  
50 55 60  
Ser Leu Leu Thr Gln Leu Phe Met Asn Val Gln Phe Arg Asp Phe Met  
65 70 75 80  
Leu Gln Leu His Leu Ser Asp Pro Asp Thr Ser Gln Arg Leu Leu Ala  
85 90 95  
Glu Thr Lys Lys Leu Phe Ala Tyr Met Gln Glu Thr Trp Leu Arg Asn  
100 105 110  
Val Asp Pro Gln Gly Leu Val Asn Asn Ile Arg Thr Tyr Asp Asn Glu  
115 120 125  
Pro Ile Asp Val Thr Ile Gln Met Asp Val Asp Glu Phe Tyr Asn Leu  
130 135 140  
Leu Phe Asp Arg Trp Glu Ala Gln Ile Thr Gly Ala Glu Asp Lys Lys  
145 150 155 160  
Lys Phe Arg Ser Phe Tyr Gly Gly Gln Leu Val Gln Gln Ile Lys Ser  
165 170 175  
Lys Glu Cys Pro His Ile Ser Glu Arg Leu Glu Pro Phe Ser Ala Ile  
180 185 190  
Gln Cys Glu Ile Lys Gly Arg Ala Ser Leu Glu Glu Ser Leu Gln Ala  
195 200 205  
Tyr Val Glu Gly Glu Ile Met Gln Gly Gly Lys Gly Leu Arg Glu Thr  
210 215 220  
Lys Ile Ala Asp Trp Pro Ser Phe  
225 230

<210> 42950  
<211> 95  
<212> PRT  
<213> A.fumigatus

<400> 42950  
Leu Ser Ser Thr Asn Leu Ala Ser Arg His Met Val Asp Lys Arg Ala  
1 5 10 15  
Arg Asn Glu Gln Gln Asn Glu Ala Lys Arg Arg Lys Leu Glu Asn Gly  
20 25 30  
Glu Glu Val Ser Asp Pro Ile Tyr Ala Thr His Phe Ser Pro Glu Asp  
35 40 45  
Ile Glu Asn Glu Gln Arg Arg Pro Lys Lys Lys Val Ala Val Leu Ile  
50 55 60  
Gly Tyr Ala Gly Thr Gly Tyr His Gly Met Gln Leu Tyr Glu Pro Trp

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<210> 42951
<211> 88
<212> PRT
<213> A.fumigatus
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<210> 42952
<211> 233
<212> PRT
<213> A.fumigatus
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|       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> | 42952 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Asn   | Cys   | Ser | Ser | Arg | Ser | Thr | Arg | Ser | Arg | Phe | Pro | Pro | Thr | Thr | Ser |  |
| 1     |       |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Arg   | Arg   | His | Gly | Ser | Thr | Arg | Ser | Thr | Ser | Ser | Ala | Thr | Asn | Lys | His |  |
|       |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Thr   | Gln   | Pro | Glu | Pro | Pro | Ser | Ser | Ser | Pro | Arg | Lys | Asn | Lys | Lys | Pro |  |
|       |       | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Ser   | Gly   | Ala | Thr | Ser | Arg | Pro | Met | Pro | Pro | Arg | Trp | Lys | Ser | Pro | Ser |  |
|       | 50    |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Pro   | Pro   | Pro | Arg | Arg | Arg | Ala | Pro | Pro | Ser | Lys | Gln | Lys | Lys | Pro | Arg |  |
| 65    |       |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Ala   | Arg   | Pro | Pro | Ser | Arg | Ser | Lys | Thr | Leu | Phe | Pro | Ser | Gly | Thr | Pro |  |
|       |       |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Thr   | Arg   | Pro | Phe | Gln | Pro | Pro | Pro | Ala | Thr | Ser | Ala | Thr | Ser | Arg | Pro |  |
|       |       |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Arg   | Gln   | Thr | Ser | Pro | Ser | Asn | Leu | Lys | Ser | Arg | Arg | Lys | Lys | Thr | Ala |  |
|       |       | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Asn   | Pro   | Arg | Ser | Arg | Thr | Trp | Thr | Thr | Arg | Ser | Pro | His | Thr | Thr | Pro |  |
|       | 130   |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Arg   | Trp   | Asn | Glu | Arg | Lys | Pro | Cys | Arg | His | Asn | Ala | Thr | Pro | Val | Ala |  |
| 145   |       |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |  |
| Pro   | Arg   | Arg | Thr | Ile | Gln | Met | Thr | Asn | Leu | Thr | Arg | Asn | Ser | Lys | Thr |  |
|       |       |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |
| Ser   | Glu   | Val | Ser | Pro | Leu | Ala | Thr | Pro | Leu | Leu | Gln | Pro | Ser | Trp | Ala |  |
|       |       |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |
| Gly   | Leu   | Pro | Val | His | Leu | Pro | Leu | Arg | Gln | Ser | Ala | Ser | Ser | Ala | Ser |  |
|       |       | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |
| Ser   | Thr   | Arg | Ile | Pro | Gly | Arg | Val | Arg | Leu | Arg | Pro | Pro | Trp | Ala | Arg |  |

## 19349

210 215 220  
 Pro Ile His Pro Pro Thr Arg Asp Arg  
 225 230

<210> 42953  
 <211> 276  
 <212> PRT  
 <213> A.fumigatus

<400> 42953  
 Asn Thr Ser Ile Tyr His Ser Pro Arg Val Ser Ile Ser Phe Thr Cys  
 1 5 10 15  
 Leu Pro Thr Ile Pro Leu Pro Tyr Pro Arg Asp Lys Gln Met Leu Thr  
 20 25 30  
 Ala Gly Leu Gly Glu Arg Ser Tyr Phe Ala Leu Thr Leu Asp Asn Gly  
 35 40 45  
 Leu His Cys Val Thr Thr Ala Trp Leu Glu Leu Gly Lys Thr Ala Pro  
 50 55 60  
 Ile Gly Gln Glu Phe Glu Leu Ile Val Gln Asn Asp Leu Glu Phe Gln  
 65 70 75 80  
 Leu Thr Leu Gln Met Lys Val Asp Asp Ala Lys Phe Arg Ala Gln Glu  
 85 90 95  
 Pro Ala Ala Pro Ala Ser Pro Ala Lys Gln Lys Ala Ser Thr Phe Ser  
 100 105 110  
 Arg Val Phe Ala Ser Pro Arg Lys Arg Lys Glu Met Glu Met Lys Gln  
 115 120 125  
 Gln Leu Ala Ser Gln Gln Gln Lys Asn Lys Asp Val Asn Ala Gly Val  
 130 135 140  
 Trp Asp Lys Leu Arg Thr Leu Ile Ala Arg Asp Gly Ser Phe Gly Arg  
 145 150 155 160  
 Ala Tyr Val Ala Leu Ser Asp His Glu Lys Tyr Ala Phe Gly Arg Pro  
 165 170 175  
 Tyr Thr Val Asp Val Ala Cys Phe Asn Glu Trp Ala Val Asp Glu Gln  
 180 185 190  
 Pro Ser Ser Val Lys Ser Lys Lys Ser Thr Ser Ser Ala Thr Ser Gln  
 195 200 205  
 Arg Arg Pro Pro Tyr Lys Ile Gly Lys Leu Glu Leu Gln Leu Leu Phe  
 210 215 220  
 Val Pro Lys Pro Lys Gly Gly Lys Asp Glu Asp Met Pro Lys Ser Met  
 225 230 235 240  
 Asn Ala Cys Ile Arg Glu Met Arg Glu Ala Glu Ala Ala Ser Ser Arg  
 245 250 255  
 Thr Trp Glu Gly Phe Leu Ser Gln Gln Gly Gly Asp Cys Pro Val Ser  
 260 265 270  
 Val Pro Ser Asp  
 275

<210> 42954  
 <211> 122  
 <212> PRT  
 <213> A.fumigatus

<400> 42954  
 His Ala Glu Thr Ala Gln Ala Asp Arg Leu Gly Arg Asp Ser Pro Gln  
 1 5 10 15  
 Arg Leu Arg Asp Gly Met Ala Ala Gln Gly Arg Arg His Pro Gln Pro

| Variable               | Mean  | Standard Deviation | Minimum | Maximum | Skewness | Kurtosis | Normality Test |
|------------------------|-------|--------------------|---------|---------|----------|----------|----------------|
| Age                    | 35.2  | 12.5               | 20      | 65      | 0.15     | 3.2      | 0.98           |
| Gender                 | 0.52  | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Marital Status         | 0.68  | 0.47               | 0       | 1       | 0.10     | 3.1      | 0.97           |
| Education              | 12.5  | 2.1                | 9       | 16      | -0.10    | 3.3      | 0.99           |
| Income                 | 45000 | 15000              | 20000   | 80000   | 0.20     | 3.4      | 0.96           |
| Health                 | 0.75  | 0.43               | 0       | 1       | -0.05    | 3.0      | 0.98           |
| Stress                 | 0.60  | 0.49               | 0       | 1       | 0.12     | 3.2      | 0.97           |
| Life Satisfaction      | 0.70  | 0.46               | 0       | 1       | -0.08    | 3.1      | 0.98           |
| Work Satisfaction      | 0.65  | 0.48               | 0       | 1       | 0.11     | 3.3      | 0.96           |
| Family Satisfaction    | 0.72  | 0.45               | 0       | 1       | -0.06    | 3.0      | 0.99           |
| Community Satisfaction | 0.68  | 0.47               | 0       | 1       | 0.10     | 3.2      | 0.97           |
| Overall Satisfaction   | 0.68  | 0.47               | 0       | 1       | 0.10     | 3.2      | 0.97           |

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<210> 42955
<211> 91
<212> PRT
<213> A.fumigatus
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<210> 42956
<211> 383
<212> PRT
<213> A.fumigatus
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 42956 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Leu         | Thr | Phe | Pro | Pro | Cys | Arg | Ser | Thr | Arg | Ala | Glu | Ile | Arg | Asp | Gly |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Ser         | Thr | Arg | Pro | Val | Asn | Arg | Glu | Tyr | Tyr | Tyr | Ile | Pro | Leu | His | Pro |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Val         | Ile | Asp | Ala | Ile | Lys | Phe | Lys | Val | Ser | Lys | Leu | Thr | Ser | Thr | Ile |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Lys         | Ala | Gln | Tyr | Thr | Pro | Ser | Glu | Glu | Arg | Lys | Glu | Tyr | Val | Cys | Leu |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Arg         | Cys | Gly | Ala | Glu | Trp | Thr | Glu | Leu | Asp | Val | Leu | Ser | Leu | Tyr | Ser |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Asp         | Glu | Gly | Phe | Glu | Cys | Gln | Asn | Cys | Gly | Ala | Ile | Leu | Glu | Arg | Thr |  |
|             |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Glu         | Asp | Val | Lys | Gly | Ala | Glu | Gly | Ile | Asp | Arg | Thr | Gly | His | Glu | Lys |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Asn         | Ser | Lys | Leu | Met | Ala | Gln | Leu | Asp | Asn | Met | Leu | Lys | Leu | Leu | Lys |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Gln         | Ile | Asp | Ser | Val | Glu | Ile | Pro | Pro | Asn | Asp | Phe | Glu | Thr | Ala | Trp |  |

## 19351

130 135 140  
 Gln His Lys Val Asp Val Ile Arg Asn Gln Gln Thr His Pro Thr Arg  
 145 150 155 160  
 Ala Ala Ile Val Val Pro Ser Lys Lys Gln Glu Ala Val Arg Gly Asn  
 165 170 175  
 Leu Gln Thr Asp Ala Ser Ala Leu Glu Ile Ser Leu Thr Ser Thr Glu  
 180 185 190  
 Glu Lys Ser Ala Ala Glu Gln Ala Glu Glu Ala Ala Arg Lys Ala Ala  
 195 200 205  
 Leu Glu Lys Gln Asn Ala Leu Pro Val Trp His Thr His Ser Thr Val  
 210 215 220  
 Ser Thr Thr Ala Gly Asn Val Ser Tyr Ile Lys Thr Glu Thr Asp Val  
 225 230 235 240  
 Ala Ile Lys Pro Glu Val Lys Glu Glu Glu Asp Arg Lys Pro Lys Ile  
 245 250 255  
 Glu Asp Leu Asp Asp Lys Val Ala Ala Tyr Tyr Ala Glu Met Glu Arg  
 260 265 270  
 Glu Lys Ala Leu Gln Ala Gln Arg Asp Ala Ser Ser Ala Glu Glu Asp  
 275 280 285  
 Asp Ser Asp Asp Glu Phe Asp Glu Glu Phe Glu Asp Val Gly Gly Ile  
 290 295 300  
 Ser Ala Ser Asp Thr Ala Ser Pro Ala Val Met Gly Gly Pro Thr Ser  
 305 310 315 320  
 Ala Pro Thr Ser Ala Pro Val Gly Ile Lys Arg Glu Phe Asp Thr Asp  
 325 330 335  
 Ser Gly Thr Ser Ala Pro Gln Thr Ala Val Gly Thr Pro Asn Thr Pro  
 340 345 350  
 Ala Asp Glu Gly Pro Val Ala Lys Lys Ile Lys Met Glu Pro Asp Val  
 355 360 365  
 Lys Lys Glu Glu Ser Asp Glu Asp Asp Glu Glu Phe Glu Asp Val  
 370 375 380

&lt;210&gt; 42957

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42957

Glu Pro Pro Pro Met Thr Val Lys Ala Gly His Val Ser Ala Ser Gln  
 1 5 10 15  
 Ala Trp Asp Lys His Ser Phe Asn His Phe Ala Ala Tyr His Thr Arg  
 20 25 30  
 Lys Leu Glu Lys Gln Arg Ser Met Gly Phe Ala Val Leu Ala Gly Asn  
 35 40 45  
 Ser Tyr Arg Thr Arg Val Gln Val Val Pro Ala Val Phe Leu Asn Ser  
 50 55 60  
 Gly Arg Cys Glu Asp Arg His Leu Lys Ser Leu Thr Ala Phe Asp Ala  
 65 70 75 80  
 Val Pro Leu Lys Ala Lys Ser Leu Thr Phe Pro Val Asn Val Tyr Lys  
 85 90 95  
 Ser Ile Val Leu Val Ala Ala Thr Arg Asn Asp Gln Trp Arg Ile Tyr  
 100 105 110  
 Val Val Val Ala Pro Phe Ser  
 115

&lt;210&gt; 42958

<211> 133  
 <212> PRT  
 <213> A.fumigatus

<400> 42958  
 Arg Ile Leu Cys Ser Asn Ser Glu Phe Leu Met Arg Ile Pro Gly Gly  
 1 5 10 15  
 Ile Phe Arg Leu Glu Leu Phe Leu Pro Glu Asp Tyr Pro Met Thr Pro  
 20 25 30  
 Pro Lys Ile Arg Phe Leu Thr Lys Ile Tyr His Pro Asn Ile Asp Arg  
 35 40 45  
 Leu Gly Arg Ile Cys Leu Asp Val Leu Lys Ser Thr Ser Phe Cys Phe  
 50 55 60  
 Leu Arg Met Ser Ala Gln Ala Asn Ser Ile Ser Asp Asn Trp Ser Pro  
 65 70 75 80  
 Ala Leu Gln Ile Arg Thr Ile Leu Leu Ser Ile Gln Ala Leu Leu Gly  
 85 90 95  
 Ala Pro Asn Pro Asp Asp Pro Leu Ala Asn Asp Val Ala Gln Arg Trp  
 100 105 110  
 Lys Glu Asp Glu Gln Ala Ala Ile Gln Thr Ala Lys Glu Trp Thr Arg  
 115 120 125  
 Ile His Ala Met Thr  
 130

<210> 42959  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 42959  
 Arg Gly Leu Leu Arg Thr Ala Pro Gln Leu Cys Arg Pro His Glu Gln  
 1 5 10 15  
 Leu Ala Ala Ala Thr Asp Ser Thr Leu Pro Pro Asn Ala Asn Arg Gln  
 20 25 30  
 Asn Leu Val Ser Thr Gly Cys Ala Ser Pro Thr Phe Lys Met Arg Thr  
 35 40 45  
 Tyr Asp Asp Ser Phe Ser Gly Gln Lys Ile Tyr Pro Gly Lys Val Arg  
 50 55 60  
 Phe Val Pro Ser Gly Ile Ile Asn His Pro Ala Ile Ser Thr Pro Ile  
 65 70 75 80  
 Leu Tyr Glu Arg Asp Thr Asp Ser  
 85

<210> 42960  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 42960  
 Ser Gln Val Ala Ile Ser Leu Thr Glu Gln Pro Ser Ala Leu Cys Pro  
 1 5 10 15  
 Gln Glu Ser Ile Glu Ser His Pro Leu Gln Arg Ser Pro Glu Arg Val  
 20 25 30  
 Gln Pro Gln Ser Thr Tyr His Leu Asp Pro Thr Ser Tyr Thr Ser Pro  
 35 40 45  
 Ala Ala Met Gly Lys Val His Gly Ser Leu Ala Arg Ala Gly Lys Val



[illegible]

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<210> 42961
<211> 276
<212> PRT
<213> A.fumigatus
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<210> 42962
<211> 166
<212> PRT
<213> A.fumigatus
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<400> 42962  
Glu Pro Trp Leu Ser Cys Gln Leu Val Pro Asp Ser Tyr Arg Gln Leu  
1 5 10 15  
Thr Gln Arg Gln Leu Glu Val Ile Arg His Ile Val Lys Asn Ile Phe

## 19354

20 25 30  
 Gln Gly Gln Ser Asp Glu Asp Thr Lys Thr Gly Lys Ala Leu Gln Asn  
 35 40 45  
 Ala Lys Lys Trp Asp Thr Lys Asn Thr Lys Cys Ile Lys Cys Phe Gly  
 50 55 60  
 Asp Cys Pro Val Cys Ser Lys Ala Cys Cys Ile Phe Asp Val Ala Arg  
 65 70 75 80  
 Arg Thr Ala Ala Gln Ala Asp Ser Thr Pro Glu His Ala Glu Ala Ala  
 85 90 95  
 Asn Gln Ile Leu Lys Leu Ile Gln Arg Leu Gly Asn Ser Val Leu Glu  
 100 105 110  
 Glu Thr Thr Tyr Ser Leu Cys Thr Thr Pro Gly Gly Cys Gly Arg Tyr  
 115 120 125  
 Val Cys Ser Asp Cys Trp Gly Ile Cys Pro Val Glu Leu Cys His Asp  
 130 135 140  
 Phe Gln Cys Lys Val Ser Asn Ile Ile Phe Leu Phe Ser Pro Cys Gln  
 145 150 155 160  
 Leu Pro Met Ile Glu Cys  
 165

&lt;210&gt; 42963

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42963

Cys Thr Leu Arg Phe Val Asp Ser Thr Ser Ser Pro Ala Glu Lys Gln  
 1 5 10 15  
 Arg Asp Val Val Gly Met Ile Trp Gly Ile Ser Gly Phe Lys Leu Leu  
 20 25 30  
 Thr His Thr Leu Ala Cys Leu Ser Ser His Asn Ser Val Met Leu Leu  
 35 40 45  
 Arg Pro Ser Tyr Ile Glu Leu Ser Ala Pro Lys Met Ile Thr  
 50 55 60

&lt;210&gt; 42964

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42964

Ala Ile Ala Asp Gly Val Cys Phe His His Glu Gln Glu Val Ala Lys  
 1 5 10 15  
 Lys Arg Thr Arg Arg Val Val Lys His Gln Arg Ala Ile Val Gly Ala  
 20 25 30  
 Ser Leu Asp Val Ile Lys Glu Arg Arg Ser Met Arg Pro Glu Ala Arg  
 35 40 45  
 Ala Ala Ala Arg Gln Gln Ala Ile Lys Glu Ala Lys Glu Lys Lys Ala  
 50 55 60  
 Ala Ser Glu Ser Arg Lys Lys Ala Glu Lys Ala Lys Asn Ala Ala Thr  
 65 70 75 80  
 Ala Ala Lys Gly Thr Ala Gln Arg Ile Gln Ser Lys Gln Gly Ala Lys  
 85 90 95  
 Gly Ser Ala Pro Lys Val Ala Ala Lys Ser Arg  
 100 105

<210> 42965  
 <211> 327  
 <212> PRT  
 <213> A.fumigatus

<400> 42965  
 Leu Gln Arg Ile Val Asp Ile Pro Leu Val Glu Glu Ser Val Asp Ser  
 1 5 10 15  
 Gly Leu Val Ser Leu Glu Ala Phe Asp Lys Val Leu Leu Glu Ala Leu  
 20 25 30  
 His Ala Ile Arg Glu Asn Ala His Ala Val Gln Gln Val Ala Asp His  
 35 40 45  
 Gln Arg Leu Glu Asp Val Gln Phe Glu Leu Ala Val His Ala Thr Asn  
 50 55 60  
 Gly Ser Gly Asn Val Val Ala His Asn Leu Gly Ala Asp His Gly Lys  
 65 70 75 80  
 Gly Leu Ala Leu Arg Gly Val Asp Leu Ala Arg His Asp Arg Arg Thr  
 85 90 95  
 Gly Leu Val Leu Arg Gln Asn Gln Leu Ser Lys Thr Ala Ala Arg Ser  
 100 105 110  
 Arg Ser Glu Val Thr Asp Ile Leu Arg Asp Leu Glu Glu Gly Ala Ser  
 115 120 125  
 Gln Ser Val Gln Gly Ala Gly Gly Leu Asn Asp Gly Val Val Ser Gly  
 130 135 140  
 Lys Asn Leu Glu Leu Val Gly Gly Gly Leu Glu Leu Gly Ala Gly Gln  
 145 150 155 160  
 Leu Gly Asp Leu Leu Ser Asn Thr Leu Ser Glu Thr Leu Glu Gly Val  
 165 170 175  
 Gln Thr Gly Ser Asp Gly Gly Thr Thr Leu Gly Lys Val Ala Glu Val  
 180 185 190  
 Gly Glu Gly Ser Leu Asn Ala Leu Asp Val Ala Val Gln Leu Ser Asp  
 195 200 205  
 Val Ala Arg Glu Leu Leu Thr Glu Ser Gln Gly Gly Val Leu Gln  
 210 215 220  
 Met Ser Thr Thr Asp Phe Asp Asp Leu Val Glu Leu Leu Asp Phe Leu  
 225 230 235 240  
 Leu Glu Ser Val Thr Lys Ala Ala Gln Gly Arg Glu Gln Ser Val Leu  
 245 250 255  
 Glu Leu Gln Asp Gly Gly Asp Met His Gly Ser Gly Glu Arg Val Ile  
 260 265 270  
 Gly Arg Gly Gly His Val Asp Val Val Val Gly Val Asp Arg Leu Leu  
 275 280 285  
 Gly Ala His Gly Thr Ala Lys Asp Leu Asn Gly Thr Val Arg Asp Asn  
 290 295 300  
 Leu Val Gly Val His Val Gly Leu Ser Ala Arg Thr Gly Leu Pro Asp  
 305 310 315 320  
 Asn Gln Arg Glu Met Val His  
 325

<210> 42966  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

<400> 42966  
 Arg Ala Gln Asn Gln His Ser Pro Pro Arg Glu Val Cys Leu Gln Ser

## 19356

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1           5           10           15
Phe Ala Ile Ile Ile Ser Glu Ala Leu Thr Cys Pro Ser Leu Met Leu
          20           25           30
Val Thr Cys Leu Asn Pro Val Ile Gly Tyr Asp Met Ala Ser Lys Val
          35           40           45
Ala Lys Asn Ala His Lys Lys Gly Ile Thr Leu Lys Glu Ser Ala Met
          50           55           60
Glu Leu Lys Ala Leu Ser Glu Glu Glu Phe Asp Lys His Ile Arg Pro
65           70           75           80
Glu Leu Met Leu Ser Pro Lys Gly Glu Glu Ile Glu Val Met Lys Ser
          85           90           95
Cys Leu Val Ala Gly Ala Met Ile
          100

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&lt;210&gt; 42967

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 42967

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Ser Leu Pro Tyr Ala Arg Phe Ser Pro Leu Trp Arg Xaa Pro Glu Val
1           5           10           15
Ala Glu Gly Lys Leu Met Asp His Phe Pro Leu Val Val Trp Gln Thr
          20           25           30
Gly Ser Gly Thr Gln Ser Asn Met Asn Ala Asn Glu Val Ile Ser Asn
          35           40           45
Arg Ala Ile Glu Ile Leu Gly Gly Thr Met Gly Thr Lys Lys Pro Val
          50           55           60
His Pro Asn Asp His Val Asn Met Ser Ala Ser Ser Asn Asp Ser Phe
65           70           75           80
Pro Thr Ala Met His Ile Ala Ala Val Leu Glu Leu Glu Asn Thr Leu
          85           90           95
Leu Pro Ser Leu Arg Ser Leu Arg Asn Ala Leu Gln Lys Lys Val Glu
          100           105           110
Lys Phe Asp Lys Ile Ile Lys Ile Gly Arg Thr His Leu Gln Asp Ala
          115           120           125
Thr Pro Leu Thr Leu Gly Gln Glu Phe Ser Gly Tyr Val Ala Gln Leu
          130           135           140
Asp Arg Asn Ile Glu Arg Val Glu Ala Ser Leu Pro His Leu Arg Tyr
145           150           155           160
Leu Ala Gln Gly Gly Thr Ala Val Gly Thr Gly Leu Asn Thr Phe Lys
          165           170           175
Gly Phe Ala Glu Gly Ile Ala Glu Glu Val Thr Lys Leu Thr Gly Thr
          180           185           190
Glu Phe Lys Thr Ala Pro Asn Lys Phe Glu Val Leu Ala His Asp
          195           200           205
Ser Ile Val Glu Ala Ser Gly Ser Leu Asn Thr Leu Ala Cys Ser Leu
          210           215           220
Phe Lys Ile Ala Gln Asp Ile Arg Tyr Leu Gly Ser Gly Pro Arg Cys
225           230           235           240
Gly Leu Gly Glu Leu Ile Leu Pro Glu Asn Glu Pro Gly Ser Ser Ile

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[illegible]

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<210> 42968
<211> 1131
<212> PRT
<213> A.fumigatus
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|          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe<br>1 | Leu | Leu | Leu | Ala | His | Val | Arg | Gly | Gly | Arg | Glu | Thr | Ala | Arg | Phe |
| Arg      | Lys | Arg | Phe | Gly | Thr | Thr | Asn | Pro | Phe | Gly | Val | Ala | Ala | Ile | Ile |
| Asp      | Met | Met | Glu | Pro | Arg | Pro | Leu | Ala | Ser | Ala | Phe | Glu | Ser | Pro | Thr |
| Phe      | Gly | Glu | Asp | Ser | Ser | Phe | His | Val | Glu | Gln | Pro | Val | Gly | Ser | Met |
| Ser      | Ile | Ser | Pro | Cys | Gly | Arg | Asp | Val | Val | Leu | Ala | Ser | Lys | Glu | Gly |
| 65       | Leu | His | Val | Ile | Asp | Leu | Asp | Ser | Pro | Tyr | Ser | Pro | Pro | Arg | Tyr |
| Pro      | His | His | Thr | Pro | Trp | Glu | Val | Ala | Asp | Val | Gln | Trp | Ser | Pro | Phe |
| Ala      | Ala | Arg | Asp | Tyr | Trp | Val | Val | Ser | Thr | Ser | Asn | Gln | Lys | Ala | Leu |
| Val      | Trp | Asn | Leu | Ala | Met | Gln | Thr | Gly | Glu | Asn | Ser | Ile | Glu | His | Val |
| Leu      | His | Ala | His | Thr | Arg | Ala | Ile | Thr | Asp | Ile | Asn | Phe | Ser | Ala | His |
| 145      | His | Pro | Asp | Leu | Leu | Ala | Thr | Cys | Ala | Val | Asp | Ser | Phe | Val | His |
| Trp      | Asp | Leu | Arg | Thr | Pro | Ser | Lys | Pro | Ala | Ile | Ser | Phe | Ser | Asp | Trp |
| Phe      | Ala | Gly | Ala | Thr | Gln | Val | Lys | Trp | Asn | Arg | Gln | Asp | Pro | Asn | Val |
| Ile      | Ala | Ser | Ser | His | Asp | Lys | Phe | Leu | Arg | Ile | Trp | Asp | Thr | Arg | Met |
| Gly      | Ala | Tyr | Pro | Ile | Lys | Ser | Ile | Glu | Ala | His | Asp | Thr | Lys | Ile | Tyr |
| 225      | Gly | Val | Asp | Trp | Asn | Arg | Val | Arg | Pro | Gly | Ala | Leu | Val | Thr | Cys |
| Leu      | Asp | Lys | Thr | Ile | Lys | Phe | Trp | Asp | Tyr | Thr | Val | Asp | Asp | Glu | Val |

Pro Glu Lys Val Ile Thr Thr Pro Phe Pro Val Trp Arg Ala Arg Asn  
 275 280 285  
 Thr Pro Phe Gly Trp Gly Val Leu Ala Met Pro Gln Arg Gly Asn Ser  
 290 295 300  
 Asp Leu His Leu Tyr Ser Arg Arg Ser Ser Asp Gly Thr Asn Leu Thr  
 305 310 315 320  
 Glu Asn Leu Pro Leu Val His Ser Phe Pro Gly His Lys Gly Gln Val  
 325 330 335  
 Lys Glu Phe Leu Trp Arg Ala Arg Gly Gly Val Ala Asp Gly Ile Asp  
 340 345 350  
 Tyr Arg Glu Phe Gln Leu Val Ser Trp Gly Thr Asp Lys Glu Leu Arg  
 355 360 365  
 Leu His Arg Val Asp Pro Asp Ile Leu Gln Leu Val Gly Tyr Glu Arg  
 370 375 380  
 Gly Lys Ser Phe Val Ser Lys Leu Asn Val Thr Arg Gln Gly Ala Val  
 385 390 395 400  
 Tyr Lys Thr Phe Arg Asp Ala Asn Gly Asp Asp Gly Tyr Gly Glu His  
 405 410 415  
 Asp Ser Ile Leu Ser Pro Asn Pro Lys Leu Ala Gly Gly Thr Gly Ile  
 420 425 430  
 Asn Thr Ile Ser Val Pro Tyr Ser Arg Pro Trp Thr Gln Gly Gly Asn  
 435 440 445  
 Glu Asp Ser Arg Val Gly Met Gln Arg Arg Ser Asn Phe Arg Ala Asp  
 450 455 460  
 Thr Asn Pro Ile Ser Trp Met Arg Gly Val Lys Ile Ser Gly Trp Asp  
 465 470 475 480  
 Ile Glu Thr Leu Gly Asp Glu Ile Thr His Val Gly Glu Lys Phe Thr  
 485 490 495  
 Lys Val Ala Phe Glu Ser Val Asp Ile Arg Gln Arg Lys Ala Thr Ile  
 500 505 510  
 Ser Leu His Gly Pro Trp Gly Pro Glu Gly Asp Ser Leu Phe Leu Lys  
 515 520 525  
 Val Asp Ile Lys Phe Pro Ser Asp Tyr Pro Lys Thr Ser Met Pro Thr  
 530 535 540  
 Phe Gly Val Gln Arg Thr Ala Ala Val Thr Asp Gln Leu Ala Asp Lys  
 545 550 555 560  
 Leu Ile Ser Glu Leu Arg Thr Ile Ala Glu Thr Tyr Leu Ser His Lys  
 565 570 575  
 Arg Gly Cys Leu Glu Gly Val Val Arg Tyr Leu Leu Gly Glu Ser Thr  
 580 585 590  
 Ile Glu Glu Ser Ile Ala His Ile Leu Gly Glu Thr Ala Glu Thr Ile  
 595 600 605  
 Lys Ser Pro Ile Asn Gly Asp Leu Gly Asp Asp Glu Ser Ser Asp Glu  
 610 615 620  
 Asp Glu Val Gly Met Ser Gln Ser Gln Glu Leu Gly Met Ser Ser Glu  
 625 630 635 640  
 Leu Leu Arg Pro Val Asn Asn Ala Asn Val Met Val Pro Val Ala Lys  
 645 650 655  
 Ala Cys Gly Ala Leu Trp Ala Asn Asp Gly Arg Leu Val Cys Phe Phe  
 660 665 670  
 Pro Ser Lys Lys Glu Lys Ser Ser Asn Leu Ile Glu Asn Leu Gly Leu  
 675 680 685  
 Lys Glu Met Ser Arg Leu Ser Arg Ala Asp Lys Val Phe Glu Gly Phe  
 690 695 700  
 Gly Arg Ile Gln Thr Ser Ser Pro Gly Pro Lys Ile Ser Gly Thr Leu  
 705 710 715 720

## 19359

Ala Ser Thr Asp Asp Gly Thr Ser Glu Tyr Ser Asp Asp Ser Asp Ala  
                     725                    730                    735  
 Glu Thr Ser Ser Ser Ser Gly Ser Ser Asp Met Leu Ser Gly Leu Gln  
                     740                    745                    750  
 Ala Arg Phe Pro Thr Ser Gln Thr Trp Arg Ser Ala Gly Ser Leu Gly  
                     755                    760                    765  
 Ile Tyr Arg Pro Arg Ser Thr Asp His Ser Gln Arg Ser Thr Ala Gly  
                     770                    775                    780  
 Ala Leu Thr Ala Lys Ser Ser Asp Ser Ala Gln Asn Ile Ile Ser Ile  
 785                    790                    795                    800  
 His Asp Phe Ser Asp Leu Leu Pro Ala Lys Arg Glu Leu Ala Arg Arg  
                     805                    810                    815  
 Tyr Arg Ile Cys Gly Lys Val Thr Asp Val Cys Ala His Asn Ala Ser  
                     820                    825                    830  
 Ala Ala Leu Asp Leu Gly Tyr His Glu Leu Ala Arg Ile Trp Gly Leu  
                     835                    840                    845  
 Val Lys Leu Ile Leu Gln His Gln Asn Asp Ser Leu Ser Ser Thr Arg  
                     850                    855                    860  
 Ser Glu Met Met Gln Arg Pro Ser Gly Ile Gln Arg Lys Asp Ser Ala  
 865                    870                    875                    880  
 Val Asp Leu Ser Phe Asp Gln Ser Asn Gln Glu Gln Ser Arg Lys Glu  
                     885                    890                    895  
 Ser Ala Asn Ser Ala Asn Gln Trp Gly Asp His Pro Tyr Gly Gly Arg  
                     900                    905                    910  
 Trp Leu Ile Pro Ser Leu Ile Asp His Phe Glu Arg Ile Gly Asp Val  
                     915                    920                    925  
 Gln Met Ile Ala Met Leu Ser Cys Val Leu Gln Gln Pro Lys Ser Glu  
                     930                    935                    940  
 Glu Ile Ser Lys Glu Ala Thr Arg Asn Arg Asp Pro Val Ser Ser Gly  
 945                    950                    955                    960  
 Met Gly His Gln Ser Phe Pro Met Asp Ile Phe Pro Thr Gln Ala Ala  
                     965                    970                    975  
 Thr Gln Asn Lys Ser Gln Ala Val Thr Pro Leu Ala Ser Thr Pro Lys  
                     980                    985                    990  
 Glu Gly His Pro Thr Pro Ile Thr Gln Ser Ser Gly Arg Ser Ser Ser  
                     995                    1000                    1005  
 Glu Phe Trp Arg Ala Asp Ser Thr Pro Pro Tyr Ser Thr Gly Thr Thr  
                     1010                    1015                    1020  
 Pro Pro Leu Ala Ser Arg Val Gly Ala Leu Asn Ala Glu Arg Lys Thr  
 1025                    1030                    1035                    1040  
 Met Ser His Asn Ile Ser Ile Ala Ala Ser Pro Asp Gln Gln Ser Gln  
                     1045                    1050                    1055  
 Pro Arg Ser Gly Ser Gly Phe Gly Ser Ala Leu Ala Ser Ser Phe Ser  
                     1060                    1065                    1070  
 Arg Ser Phe Thr Phe Gly Pro Ser Ser Ala Ser Pro Thr Ala Val Pro  
                     1075                    1080                    1085  
 Ser Gly Gln Lys Lys Gln Ser Pro Ser Gly Ser Leu Ile Thr Ser Ala  
                     1090                    1095                    1100  
 Phe Ala Gly Lys Pro Ala Thr Ala Val Pro Asp Tyr Leu Ala Pro Ser  
 1105                    1110                    1115                    1120  
 Ala Ala Leu Thr Ser Gln Thr His Ser Asp Ile  
                     1125                    1130

&lt;210&gt; 42969

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42969

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Ile Pro Cys Phe Val His Pro Leu Ile Pro Trp Tyr Leu Thr Ser Arg
1          5          10          15
Val Gln Ile Lys Ser Pro Tyr Asn Asn Ser Ser Leu Ile Asn Thr Pro
20          25          30
Pro Glu Gly Ala Gln Ser Thr Thr Asn Pro Pro Leu Gln Thr Asn Ser
35          40          45
Ser Ser Ser Ile Leu Asn Cys Thr Val Thr Asp Arg Ile Asn Pro Lys
50          55          60
Met Thr Asn Ala Thr Ile Ala Pro Thr Thr Thr Ala Ala Pro Val Thr
65          70          75          80
Lys Ser Val Asp Ala Pro Thr Ala Asp Glu Asn Thr Pro Leu Phe Ser
85          90          95
Pro Ser Leu Ile Ser Pro Asp Val Leu Ala Val Leu Pro Ala Asp Tyr
100         105         110
Thr Ile Arg Pro Leu Cys Arg Ser Asp Tyr Lys Arg Gly Tyr Leu Asp
115         120         125
Val Leu Arg Val Leu Thr Thr Val Gly Asp Ile Asn Glu Glu Gln Trp
130         135         140
Asn Ser Arg Tyr Glu Trp Ile Arg Ala Arg Ser Asp Glu Tyr Tyr Leu
145         150         155         160
Leu Val Val Cys Asp Gly Glu Gly Arg Ile Val Gly Thr Gly Ser Leu
165         170         175
Val Val Glu Arg Lys Phe Ile His Ser Leu Gly Met Val Gly His Ile
180         185         190
Glu Asp Ile Ala Val Glu Lys Gly Gln Gln Gly Lys Lys Leu Gly Leu
195         200         205
Arg Ile Ile Gln Ala Leu Asp Tyr Val Ala Glu Lys Val Gly Cys Tyr
210         215         220
Lys Val Cys Ser Val Phe Cys Leu Leu Phe Gly Ala Cys Arg Val Gly
225         230         235         240
Asp Trp Gly

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&lt;210&gt; 42970

&lt;211&gt; 1184

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42970

```

Val Val Val Thr Ala Thr Ala Glu Arg Pro His Ser His Tyr Leu Thr
1          5          10          15
Leu Val Leu Phe Ala Phe Lys Lys Lys His Gly Leu Asn Val Met Lys
20          25          30
Asp Ile Cys Asp Val Phe Met Arg Glu Val Arg Ala Leu Thr Pro Pro
35          40          45
Glu Ser Val Ser Glu Ser Glu His Asp Val Ser Ala Arg Leu Thr Ser
50          55          60
Ala Tyr Gly Gly Ile Lys Ile Ile Leu Ser Phe Phe Ala Glu Leu Ala
65          70          75          80
Ser Gly Lys Asn Ile Val Asp Ser Ser Gln Thr Gln Ala Ile Thr Thr
85          90          95
Gly Asp Arg Asp Arg Asp Arg Pro Asp Tyr Phe Gln Pro Gly Gln Phe
100         105         110

```



Leu Val Asp Leu Arg Met Glu Ile Leu Pro Met Ala Arg Glu Leu Trp  
 115 120 125  
 Asn Ser Asp Phe Ala Thr Gln Ser Ser Ser Ser Val Val Lys Cys Leu  
 130 135 140  
 Val Asp Ile Leu Arg Ser Ser Leu Asp Gly Glu Tyr Glu Thr Gly Ala  
 145 150 155 160  
 Ala Arg Arg Ser Asp Thr Pro Pro Leu Leu Ala Glu Ala Thr Arg Lys  
 165 170 175  
 Thr Val Val Val Asn Lys Asp Arg Val Thr His Leu His Gly Glu Lys  
 180 185 190  
 Gly Phe Asp Lys Asp Leu Ala Thr Glu Ala Leu Tyr Arg Cys Asn Asn  
 195 200 205  
 Val Tyr Leu Ala Ala Glu Glu Tyr Cys Lys Ala Gln Lys Arg Leu Arg  
 210 215 220  
 Ala Pro Pro Arg Val Pro Pro Asn Pro Glu Asp Ile Asp Ser Ala Gly  
 225 230 235 240  
 Gly Glu Thr Ser Glu Asp Thr Ala Leu Gly Asp Ala Pro Pro Phe Asn  
 245 250 255  
 Ser Gly Phe Leu Glu Arg Ser Thr Leu Ala Met Leu Leu Ala Gln Ala  
 260 265 270  
 Ser Gly Arg Ser Ser Asp Asp Ala Ser Arg Gln Gln Gln Asp Gln Asp  
 275 280 285  
 Arg Pro Asp Asn Glu Leu Gly Ser Gly Thr Glu Phe Leu Ala Arg Ala  
 290 295 300  
 Leu Thr Gln Ile Leu Asn Asp Glu Gln Ser Val Ala Gly Glu Asp Arg  
 305 310 315 320  
 Asp Met Ser Ser His Arg Asn Val Arg Asn Ala Asp Pro Ser Gly Asn  
 325 330 335  
 Ser Ser Glu Ser Ser Asn Gln Ala Gly Ser Gly Gln Thr Thr Gly Gln  
 340 345 350  
 Ser Ser Arg Arg Arg Glu Leu Thr Thr Val Glu Asp Leu Asp Gly Glu  
 355 360 365  
 Arg Glu Lys Val Arg Ser Asn Leu Ile Glu Arg Cys Leu Asp Val Leu  
 370 375 380  
 Asn Glu His His Asp Val Ser Phe Glu Leu Ser Asp Leu Ile Ala Ser  
 385 390 395 400  
 Ala Thr Lys Lys His Ser Asp Pro Glu Ser Phe Arg Arg Glu Val Gly  
 405 410 415  
 Glu Ile Leu Val Gln Ser Leu Val Ser Leu Gln Met Glu Asn Phe Gln  
 420 425 430  
 Val Ala Gly Lys Lys Val Ala Ala Tyr Ala His Leu Leu Ala Leu Val  
 435 440 445  
 Leu Gln Asp Lys Asp Met Tyr Thr Ala Thr Leu Asp Glu Leu Lys Glu  
 450 455 460  
 Cys Phe Thr Thr Phe Leu Gly Phe Ile Lys Val Ser Pro Glu Lys Ser  
 465 470 475 480  
 Ala Asp Glu Phe Phe Pro Trp Ile Gly His Val Leu Leu Ile Leu Glu  
 485 490 495  
 Lys Leu Leu Ser Asp Asp Ala Gln Pro Pro Gln Ile Arg Trp Asn Leu  
 500 505 510  
 Pro Asp Ser Asp Ser Ser Thr Pro Asp Asp Ala Gly Pro Ala Gln Leu  
 515 520 525  
 Glu Glu Pro Leu Val Ser Leu Asp Gln Lys Thr Gln Leu Tyr Glu Ala  
 530 535 540  
 Ile Val Glu Ile Leu Pro Arg Ile Gly Lys Asp Asp Thr Leu Ala Leu  
 545 550 555 560

Ser Val Cys Arg Ile Leu Val Ile Leu Thr Arg Ser Arg Ser Ile Ala  
 565 570 575  
 Val Arg Leu Gly Glu Lys Arg Ser Leu Gln Arg Leu Phe Val Met Val  
 580 585 590  
 Lys Gln Leu Ser Ser Ser Thr Asn Glu Lys Leu Gln Ser Ala Phe Met  
 595 600 605  
 Leu Ile Leu Arg His Ile Val Glu Asp Glu Asp Thr Ile Arg Gln Ile  
 610 615 620  
 Met Arg Ser Glu Ile Val Ala Asn Phe Glu Ser Lys Ser Ser Arg Gln  
 625 630 635 640  
 Ile Asp Thr Thr Gly Tyr Val Arg Gln Met Tyr His Leu Val Leu Arg  
 645 650 655  
 Ser Pro Glu Leu Phe Val Glu Val Ser Asn Glu Lys Leu Lys Leu Gln  
 660 665 670  
 Arg Tyr Asp Asn Arg Gln Arg Pro Gln Ile Leu Thr Leu Lys Ser Asp  
 675 680 685  
 Lys Thr Ser Ser Ala Pro Gly Ser Ser Ser Ala Arg Glu Gly Ala Glu  
 690 695 700  
 Gly Met Ser Thr Gly Asn Asn Val Ser Asn Gly Ala Pro Ser Leu  
 705 710 715 720  
 Asp Asp Lys Glu Lys Ser Lys Ala Ala Asp Leu Lys Pro Pro Val Val  
 725 730 735  
 Glu Asn Pro Asp Gly Val Ile His Tyr Leu Leu Ser Glu Leu Leu Ser  
 740 745 750  
 Tyr Lys Asp Val Glu Asp Lys Glu Pro Pro Ala Glu Ala Gly Asp Ala  
 755 760 765  
 Ala Val Asn Asp Gln Ser Glu Thr Gln Thr Asp Ile Glu Met Ala Thr  
 770 775 780  
 Asp Glu Pro Thr Pro Ser Val Ser Ser Ala Glu Leu Ala Gly Ala Arg  
 785 790 795 800  
 Thr Ser Lys Lys Gln Glu Lys Pro Pro Phe Lys Ala Asp Glu His Pro  
 805 810 815  
 Ile Tyr Ile Tyr Arg Cys Phe Leu Leu Gln Cys Leu Thr Glu Leu Leu  
 820 825 830  
 Ser Ser Tyr Asn Arg Thr Lys Val Glu Phe Ile Asn Phe Ser Arg Lys  
 835 840 845  
 Ala Asp Pro Leu Ala Thr Thr Pro Ser Lys Pro Arg Ser Gly Ile Leu  
 850 855 860  
 Asn Tyr Leu Leu Asn Val Leu Val Pro Val Gly Thr Met Glu His Asp  
 865 870 875 880  
 Glu Ser Ile Ala Phe Lys Lys Arg Ser Asn Thr Ser Ala Trp Thr Met  
 885 890 895  
 Arg Val Leu Val Ala Leu Cys Thr Lys Thr Gly Glu Phe Gly Gly Thr  
 900 905 910  
 Gly Arg Arg Arg Asn Asp Gln Thr Ala Asn Glu Glu Asp Glu Pro Glu  
 915 920 925  
 Leu Ala Phe Val Arg Arg Phe Val Leu Glu His Ala Leu Arg Thr Tyr  
 930 935 940  
 Lys Glu Ala Asn Ala Ser Asn Glu Gln Leu Asp Val Lys Tyr Ser Arg  
 945 950 955 960  
 Leu Met Ser Leu Ala Asp Leu Phe Asp Lys Met Leu Ser Gly Tyr Ala  
 965 970 975  
 Phe Val Ser Gly Asp Thr Thr Phe Pro Ser Ser Thr Arg Gln Leu Ala  
 980 985 990  
 Lys Thr Met Tyr Glu Lys His Phe Ile Ala Ala Leu Thr Ala Ser Ile  
 995 1000 1005

## 19363

Ala Glu Ile Asp Leu Asn Phe Pro Ala Ser Lys Arg Val Ile Lys Tyr  
 1010 1015 1020  
 Ile Leu Arg Pro Leu Asn Lys Leu Thr Gln Thr Ala Val Ile Leu Ser  
 1025 1030 1035 1040  
 Glu Ser Ser Asp Ile Ser Ser Leu Gly Asp Thr Glu Glu Asp Glu Ile  
 1045 1050 1055  
 Ser Ser Ala Thr Ser Val Ser Asp Leu Asp Asp Asp Arg Glu Glu Thr  
 1060 1065 1070  
 Pro Asp Leu Phe Arg His Ser Thr Leu Gly Met Leu Glu Pro His His  
 1075 1080 1085  
 Glu Glu Glu Thr Ser Ser Glu Glu Ser Glu Glu Glu Glu Asp Asp Glu  
 1090 1095 1100  
 Met Tyr Asp Asp Glu Tyr Gly Asp Glu Met Asp Tyr Asp Glu Asp Met  
 1105 1110 1115 1120  
 Pro Glu Asp Asp Gly Glu Val Ile Ser Asp Glu Glu Asp Glu Ile Glu  
 1125 1130 1135  
 Gly Val Gly Pro Ile Glu Gly Leu Pro Gly Asp Ser Gly Met Asp Ile  
 1140 1145 1150  
 Glu Val Val Ile Asp Asp Glu Asp Glu Asp Asp Glu Glu Asp Asp  
 1155 1160 1165  
 Glu Glu Asp Asp Glu Ser Asp Leu Asp Asp Asp Glu Ile Pro Ala Gly  
 1170 1175 1180

&lt;210&gt; 42971

&lt;211&gt; 1321

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42971

His Cys Asn Ser Ile Glu Glu Asp Leu Ile Asp Pro Trp Gly Trp Asp  
 1 5 10 15  
 Gly Asp Glu Pro Pro Leu His Arg Gly His His Gln Arg Phe Arg Gly  
 20 25 30  
 Pro Gln Pro Thr Trp Ala Ala Val Thr Gly Met Val Pro Asn Arg His  
 35 40 45  
 Gly Ile Val Pro Ile Gln Pro Tyr Arg Phe His Arg Thr Gln Ile Pro  
 50 55 60  
 Ala Arg Gly Thr Asp Asp Gly Thr Asn Pro Leu Leu Val Arg Thr Asp  
 65 70 75 80  
 Arg Ser Ala Glu Thr Ala Gln Pro Arg Leu Pro Gly Asn Glu Ala Phe  
 85 90 95  
 Thr Asp Trp Val His Gly Met Glu Pro Val Ser Thr Gly Arg Leu Val  
 100 105 110  
 Pro Met Asp Ser Pro Val Ser Phe Met Asn Ala Ile Met Gln Ala Ile  
 115 120 125  
 Ser Gly Gln Ala Thr Pro Gly Phe Gly Val Ile Thr Arg Pro Asp Gly  
 130 135 140  
 Ile His Val His Val Asp Arg Arg Ala Ile Leu Pro Asn Arg Ser Ile  
 145 150 155 160  
 Gln Asp Ile Phe Gly Leu Gly Arg Pro Gln Ala Pro Pro Ser Arg Thr  
 165 170 175  
 Arg Asp Asp Pro Ser Gln Ala Val Ser Phe Ala Leu Ala Thr Thr Arg  
 180 185 190  
 Ser Arg Trp Gln Glu Glu Ala Arg Ile Leu Phe Ser Ser Thr Tyr Val  
 195 200 205  
 Glu Lys Thr Gln Arg Val Val Asn Ser Leu Leu Lys Ile Leu Val Pro

|                         |                     |                         |
|-------------------------|---------------------|-------------------------|
| 210                     | 215                 | 220                     |
| Pro Ala Ile Glu Glu Glu | Lys Gln Arg Glu Lys | Gln Met Glu Glu Glu     |
| 225                     | 230                 | 235                     |
| Arg Lys Arg Arg Glu Glu | Glu Arg Ala Glu Arg | Glu Arg Gln Glu Arg     |
| 245                     | 250                 | 255                     |
| Ile Ala Arg Glu Glu Glu | Glu Lys Glu Arg Lys | Glu Glu Glu             |
| 260                     | 265                 | 270                     |
| Glu Asn Ala Arg Arg Gln | Gln Glu Met Glu Gln | Gln Glu Ala Glu Arg     |
| 275                     | 280                 | 285                     |
| Gln Ala Ala Gly Ile Val | Ser Glu Pro Met Asp | Asp Val Gln Glu Thr     |
| 290                     | 295                 | 300                     |
| Ala Ile Glu Glu Ala Ala | Glu Pro Ser Thr Gln | Ala Glu Val Gly Pro     |
| 305                     | 310                 | 315                     |
| Ser Glu Pro Val Arg Arg | Val His Thr Thr Ile | Arg Gly Arg Gln Leu     |
| 325                     | 330                 | 335                     |
| Asp Ile Thr Gly Met Glu | Ile Asp Pro Glu Tyr | Leu Glu Ala Leu Pro     |
| 340                     | 345                 | 350                     |
| Glu Glu Leu Arg Glu Glu | Val Ile Met Gln Gln | Leu Ala Glu Gln Arg     |
| 355                     | 360                 | 365                     |
| Ser Gln Ala Ala Ala Ala | Gly Glu Glu Pro Ser | Glu Ile Asn Gln Glu     |
| 370                     | 375                 | 380                     |
| Phe Leu Glu Ala Leu Pro | Pro Asp Ile Arg Glu | Glu Glu Leu Leu Gln Gln |
| 385                     | 390                 | 395                     |
| Glu Ala Ala Asp Arg Arg | Arg Arg Glu Arg Glu | Ser Ala Arg Arg Gln     |
| 405                     | 410                 | 415                     |
| Ala Ala Val Ala Asn Ala | Pro Ala His Ala Glu | Asn Met Asp Ala Ala     |
| 420                     | 425                 | 430                     |
| Ser Phe Leu Ala Thr Leu | Asp Pro Ser Leu Arg | Gln Ala Val Leu Ala     |
| 435                     | 440                 | 445                     |
| Asp Gln Pro Glu Glu Ile | Leu Ala Thr Leu Gly | Pro Glu Phe Val Thr     |
| 450                     | 455                 | 460                     |
| Glu Ala Arg Ala Leu Pro | Gly Arg Arg Leu Ala | Gln Phe Gly Asp Ile     |
| 465                     | 470                 | 475                     |
| Thr Arg Ala Asp His Arg | Pro Arg Asn Glu Pro | Ala Glu Asp Gln Glu     |
| 485                     | 490                 | 495                     |
| Thr Lys Lys Pro Gln Arg | Arg Gln Ile Val Gln | Met Leu Asp Lys Ala     |
| 500                     | 505                 | 510                     |
| Gly Val Ala Thr Leu Leu | Arg Leu Met Phe Met | Pro Leu Gln Gly Asn     |
| 515                     | 520                 | 525                     |
| Ala Arg His Gln Leu Asn | Asp Ile Leu His Asn | Val Cys Glu Asn Arg     |
| 530                     | 535                 | 540                     |
| Gln Asn Arg Ser Glu Val | Ile Ser Leu Leu Leu | Ser Ile Leu Gln Asp     |
| 545                     | 550                 | 555                     |
| Gly Ser Val Asp Val Pro | Ala Ile Glu Arg Ser | Phe Ala His Leu Ser     |
| 565                     | 570                 | 575                     |
| Leu Arg Ala Lys Pro Ser | Ser Val Gln Lys Thr | Pro Gln Ser Val Lys     |
| 580                     | 585                 | 590                     |
| Arg Asn Met Ala Phe His | Thr Ser Ser Ser Val | Ser Ser Glu Val Thr     |
| 595                     | 600                 | 605                     |
| Pro Ile Met Val Val Gln | Gln Cys Leu Gly Thr | Leu Ser Phe Leu Ser     |
| 610                     | 615                 | 620                     |
| Gln Tyr Asn Pro His Ile | Ala Trp Phe Phe Leu | Thr Glu His Asp Pro     |
| 625                     | 630                 | 635                     |
| Thr Ser Thr Leu Lys Leu | Lys Thr Ser Arg Lys | Gly Lys Gly Lys Glu     |
| 645                     | 650                 | 655                     |
| Ile Lys Ala Asn Lys Phe | Ala Leu Asn Ala Leu | Leu Asn Leu Leu Asp     |

|     |      |     |     |     |     |     |      |     |     |     |     |      |     |     |     |  |  |
|-----|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|--|--|
|     |      |     | 660 |     |     |     |      | 665 |     |     |     |      | 670 |     |     |  |  |
| Arg | Ser  | Leu | Ile | Met | Glu | Asn | Pro  | Asn | Cys | Met | Glu | Gln  | Leu | Ser | Ser |  |  |
|     |      | 675 |     |     |     |     | 680  |     |     |     |     | 685  |     |     |     |  |  |
| Leu | Leu  | Asn | Ser | Ile | Thr | Gln | Pro  | Leu | Thr | Leu | Leu | Leu  | Arg | Arg | Glu |  |  |
|     | 690  |     |     |     |     | 695 |      |     |     |     | 700 |      |     |     |     |  |  |
| Lys | Glu  | Lys | Gln | Glu | Glu | Glu | Glu  | Glu | Glu | Glu | Asp | Lys  | Gly | Lys | Lys |  |  |
| 705 |      |     |     |     | 710 |     |      |     |     |     | 715 |      |     |     | 720 |  |  |
| Pro | Glu  | Gln | Ala | Gln | Val | Val | Glu  | Pro | Ser | Ala | Asp | Gln  | Glu | His | Ala |  |  |
|     |      |     |     | 725 |     |     |      |     | 730 |     |     |      |     | 735 |     |  |  |
| Val | Gln  | Pro | Ser | Glu | Ser | Thr | Glu  | Pro | Ala | Ala | Gly | Thr  | Asp | Thr | Thr |  |  |
|     |      |     | 740 |     |     |     |      | 745 |     |     |     |      | 750 |     |     |  |  |
| Met | Thr  | Asp | Ala | Pro | Ala | Ala | Thr  | Phe | Glu | Asp | Ala | Glu  | Gln | Gln | Val |  |  |
|     |      | 755 |     |     |     |     | 760  |     |     |     |     | 765  |     |     |     |  |  |
| Ala | Gln  | Thr | Val | Ala | Gln | Glu | Asp  | Ala | Ala | Pro | Val | Glu  | Ala | Asp | Lys |  |  |
|     | 770  |     |     |     |     | 775 |      |     |     |     | 780 |      |     |     |     |  |  |
| Pro | Glu  | Ala | Thr | Lys | Glu | Thr | Val  | Glu | Asp | Glu | Lys | Pro  | Lys | Arg | Lys |  |  |
| 785 |      |     |     |     | 790 |     |      |     |     |     | 795 |      |     |     | 800 |  |  |
| Thr | Ile  | Glu | Pro | Pro | Val | Val | Pro  | Asp | Gln | Asn | Leu | Arg  | Leu | Val | Val |  |  |
|     |      |     |     | 805 |     |     |      |     | 810 |     |     |      |     | 815 |     |  |  |
| His | Ile  | Leu | Ala | Ala | Arg | Glu | Cys  | Asn | Gly | Lys | Thr | Phe  | Arg | Glu | Thr |  |  |
|     |      |     | 820 |     |     |     |      | 825 |     |     |     |      | 830 |     |     |  |  |
| Leu | Ser  | Thr | Ile | Asn | Asn | Leu | Ser  | Ala | Ile | Pro | Gly | Ala  | Arg | Asp | Val |  |  |
|     |      | 835 |     |     |     |     | 840  |     |     |     |     | 845  |     |     |     |  |  |
| Ile | Gly  | Asn | Glu | Leu | Val | Asn | Gln  | Ala | Leu | Ser | Leu | Cys  | Thr | Thr | Ile |  |  |
|     | 850  |     |     |     |     | 855 |      |     |     |     | 860 |      |     |     |     |  |  |
| Leu | Thr  | Asp | Leu | Asp | Glu | Leu | Leu  | Ser | His | Ile | His | Gln  | Ala | Arg | Thr |  |  |
| 865 |      |     |     |     | 870 |     |      |     |     | 875 |     |      |     |     | 880 |  |  |
| Gly | Thr  | Asp | Met | Gln | Gly | Leu | Ala  | Leu | Val | Lys | Phe | Ser  | Pro | Ala | Ser |  |  |
|     |      |     |     | 885 |     |     |      |     | 890 |     |     |      |     | 895 |     |  |  |
| Ser | Asp  | Gln | Ala | Lys | Leu | Leu | Arg  | Val | Leu | Thr | Ala | Leu  | Asp | Tyr | Leu |  |  |
|     |      |     | 900 |     |     |     |      | 905 |     |     |     |      | 910 |     |     |  |  |
| Phe | Asp  | Pro | Asn | Arg | Ala | Asp | Lys  | Ile | Lys | Ala | Pro | Glu  | Pro | Asp | Ser |  |  |
|     |      | 915 |     |     |     |     | 920  |     |     |     |     | 925  |     |     |     |  |  |
| Thr | Ala  | Lys | Glu | Asp | Val | Leu | Gln  | Thr | Leu | Tyr | Glu | Ser  | Ser | Thr | Phe |  |  |
|     | 930  |     |     |     |     | 935 |      |     |     |     | 940 |      |     |     |     |  |  |
| Gly | Pro  | Leu | Trp | Thr | Lys | Leu | Ser  | Glu | Cys | Leu | Thr | Val  | Ile | Arg | Gln |  |  |
| 945 |      |     |     |     | 950 |     |      |     |     | 955 |     |      |     |     | 960 |  |  |
| Lys | Glu  | Asn | Met | Leu | Asn | Val | Ala  | Thr | Ile | Leu | Leu | Pro  | Leu | Ile | Glu |  |  |
|     |      |     |     | 965 |     |     |      |     | 970 |     |     |      |     | 975 |     |  |  |
| Ala | Leu  | Met | Val | Val | Cys | Lys | Asn  | Thr | Thr | Leu | Lys | Asp  | Thr | Ser | Ile |  |  |
|     |      |     | 980 |     |     |     |      | 985 |     |     |     |      | 990 |     |     |  |  |
| Ala | Arg  | Asn | Ser | Arg | Glu | Leu | Ser  | Val | Ser | Thr | Thr | Ser  | Ala | Asp | Ala |  |  |
|     |      | 995 |     |     |     |     | 1000 |     |     |     |     | 1005 |     |     |     |  |  |
| Gly | Leu  | Asn | Met | Glu | Gly | Leu | Phe  | Phe | Arg | Phe | Thr | Glu  | Asp | His | Arg |  |  |
|     | 1010 |     |     |     |     | 10  |      |     |     |     |     |      |     |     |     |  |  |

## 19366

1105                      1110                      1115                      1120  
 Ala Gly Gly Val Thr Arg Glu Trp Phe Gln Val Leu Ala Arg Gly Met  
                          1125                      1130                      1135  
 Phe Asn Pro Asn Tyr Ala Leu Phe Ile Pro Val Ala Ala Asp Arg Thr  
                          1140                      1145                      1150  
 Thr Phe His Pro Asn Arg Leu Ser Gly Val Asn Ser Glu His Leu Met  
                          1155                      1160                      1165  
 Phe Phe Lys Phe Ile Gly Arg Ile Ile Gly Lys Ala Leu Tyr Glu Gly  
                          1170                      1175                      1180  
 Arg Val Leu Asp Cys His Phe Ser Arg Ala Val Tyr Lys Cys Ile Leu  
 1185                      1190                      1195                      1200  
 Gly Arg Ser Val Ser Ile Lys Asp Met Glu Thr Leu Asp Leu Asp Tyr  
                          1205                      1210                      1215  
 Tyr Lys Ser Leu Leu Trp Met Leu Glu Asn Asp Ile Thr Asp Ile Ile  
                          1220                      1225                      1230  
 Thr Glu Thr Phe Ala Val Glu Thr Asp Asp Phe Gly Glu Lys Gln Val  
                          1235                      1240                      1245  
 Ile Asp Leu Ile Glu Asn Gly Arg Asn Ile Pro Val Thr Gln Glu Asn  
                          1250                      1255                      1260  
 Lys Glu Glu Tyr Val Gln Arg Val Val Asp Tyr Arg Leu Val Lys Ser  
 1265                      1270                      1275                      1280  
 Val Lys Asp Gln Leu Asp Asn Phe Leu Lys Gly Met Ser Leu Ser Leu  
                          1285                      1290                      1295  
 Leu Ser Ser Phe Leu Asn Ser Ile Met Thr Thr Asn Ala His Tyr Leu  
                          1300                      1305                      1310  
 Tyr Arg Leu Pro Arg His His Ser Ser  
                          1315                      1320

&lt;210&gt; 42972

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42972

Ile Asn Leu Leu Leu Leu Pro Ala Val Phe Ile Leu Gln Ser Thr  
 1                      5                      10                      15  
 Lys Pro Asn Asp Ile Asn Asp Gly Leu Met Glu Leu Leu Ile Met Ile  
                          20                      25                      30  
 Asn Ala Cys Lys Thr Ala Ser Ala Arg Arg Ile Thr Ala Val Ile Pro  
                          35                      40                      45  
 Asn Phe Pro Tyr Ala Arg Gln Asp Lys Lys Asp Lys Ser Arg Ala Pro  
                          50                      55                      60  
 Ile Thr Ala Lys Leu Met Ala Asn Met Leu Gln Thr Ala Gly Cys Asn  
 65                      70                      75                      80  
 His Val Ile Thr Met Asp Leu His Ala Ser Gln Ile Gln Gly Phe Phe  
                          85                      90                      95  
 Asn Val Pro Val Asp Asn Leu Tyr Ala Glu Pro Ser Met Leu Lys Trp  
                          100                      105                      110  
 Ile Arg Glu His Leu Asp Val Lys Asn Cys Val Ile Val Ser Pro Asp  
                          115                      120                      125  
 Ala Gly Gly Ala Lys Arg  
                          130

&lt;210&gt; 42973

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42973

Leu Cys Leu Tyr Ser Ala Thr Gly Ile Ala Asp Arg Leu Asp Leu Gln  
 1 5 10 15  
 Phe Ala Leu Ile His Lys Glu Arg Pro Arg Pro Asn Glu Val Ser Arg  
 20 25 30  
 Met Val Leu Val Gly Asn Val Lys Asp Lys Ile Ala Ile Ile Val Asp  
 35 40 45  
 Asp Met Ala Asp Thr Cys Gly Thr Leu Val Lys Ala Ala Asp Thr Val  
 50 55 60  
 Met Gln His Gly Ala Lys Glu Val Asn Ala Ile Val Val His Gly Ile  
 65 70 75 80  
 Leu Ser Gly Asn Ala Ile Glu Asn Ile Asn Asn Ser Cys Leu Lys Arg  
 85 90 95  
 Leu Val Val Thr Asn Thr Val Pro His Lys Glu Lys Lys Glu Leu Cys  
 100 105 110  
 Asp Lys Ile Asp Thr Ile Asp Ile Ser Pro Thr Leu Ala Glu Ala Cys  
 115 120 125  
 Arg Arg Thr His Asn Gly Glu Ser Val Ser Phe Leu Phe Ser His Ala  
 130 135 140  
 Val Ala  
 145

&lt;210&gt; 42974

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42974

Phe Pro His Ala Asp Ala Pro Gly Pro Trp Arg Ile Gln His Val Lys  
 1 5 10 15  
 Cys Leu Lys Asp Asp His Asn Leu Val Arg Ser Leu Gly Thr Thr Phe  
 20 25 30  
 Asp Glu Leu Val Arg His His Pro Ala Leu Lys Ala Ser Ile Met Thr  
 35 40 45  
 Ala Ile Ile Val Met Val Ala Arg Val Gly Leu Leu Cys Lys Ser Lys  
 50 55 60  
 Ala Trp Ala His Gly Met Gly Thr Lys Met Trp Val Glu Gly Pro Gln  
 65 70 75 80  
 Gly Lys Pro Gln Ile Ser Gly Asn Tyr Asp Val Leu Ala Leu Glu Ile  
 85 90 95  
 Gly Ala Ala Met Asp Ala Ser Leu Asp Asp Phe Arg Asn Leu Gly Val  
 100 105 110  
 Arg Glu Leu Thr Ser Ala Thr Leu Pro Asn Gly Gly Lys Leu Asn Leu  
 115 120 125  
 Gly Asp Leu Thr Gln Leu Leu Pro Ser Ser Pro Glu Tyr Ala Glu Pro  
 130 135 140  
 Gln Asp Val Asp Ala Ala Gly Leu Thr Val Thr Asp Tyr Val Tyr Pro  
 145 150 155 160  
 Val Val Arg Phe Leu Gly Ala Phe Phe Glu Asn Gln Ala Asn Cys Ser  
 165 170 175  
 Ser Phe Ile Glu Ser Gly Ala Val Glu Phe Val Leu Asp Phe Ala Thr  
 180 185 190  
 Leu Gln Ser Leu Pro Phe Asp Phe His Asn Ser Asp Ala Asn Gln Glu  
 195 200 205

## 19368

```

Leu Thr Val Leu Val His Met Leu Ala Glu Thr Lys Pro His Leu Val
 210                      215                      220
Leu Pro Ser Leu Val Thr Arg Ala Glu Thr Ala Val Asn Ser Leu Ser
225                      230                      235                      240
Gly Phe Trp Ser Glu Pro Lys Asp Ser Gly Phe Phe Thr Pro Leu Ile
                      245                      250                      255
Lys Pro Ala Thr Glu Lys Ser Ser Glu Glu Lys Gly Lys Glu Thr Leu
                      260                      265                      270
Asp Ile Ala Lys Thr Asn Gly Thr Tyr Phe Ala Lys His Met Ala Ala
                      275                      280                      285
Thr Leu Val Leu Thr Asp Leu Leu Arg Glu Ile Phe Ser Met Pro Leu
290                      295                      300
Tyr Gln Thr Arg Pro Ser Gln His Thr Ser Ala Phe Ala Gln Val Asn
305                      310                      315                      320
Leu Ala Asp Arg Tyr Cys Val Leu Val Ser Ala Leu Gly Ser Leu His
                      325                      330                      335
Ala Ala Cys Val Trp Glu Glu Ile Leu Leu Glu Lys Asn Ile Pro Ala
                      340                      345                      350
Thr Trp Asp Gln Ala Thr Lys Ala Gln Ala Val Ser Ser Asp Lys Ala
                      355                      360                      365
Asn Glu Gly Ala Lys Pro Pro Thr Ala Glu Gly Ser Thr Ala Glu Ser
                      370                      375                      380
Ala Pro Glu Gly Ser Ala Asn Arg Gly Pro Glu Leu Gln Gly Ser Val
385                      390                      395                      400
Gln Gln Ser Asn Asp Thr Thr Lys Ile Pro Glu Gly Gly Ala Ala Phe
                      405                      410                      415
Lys Asn Val Gln Ala Leu Arg Tyr Leu Leu Ser Ser Leu Pro Ser Ser
                      420                      425                      430
Ile Thr Gly Phe Phe His Asn Leu Gly Leu Gly Leu Ile Gly Lys Arg
                      435                      440                      445
Arg Val Asp Ser Tyr Gln Arg Gln Asn Ala Ala Leu Val Ala Asp Ala
                      450                      455                      460
Ile Ala Glu Ala Val Leu Lys Gln Leu Gln Phe Ser Pro Pro Asn Ser
465                      470                      475                      480
Ser Asp Asn Pro Lys His Arg Phe Ala Tyr Leu Ile Val Ile Leu Ser
                      485                      490                      495
Ser Phe Ser His Leu Leu Tyr Glu Gly Lys Leu Leu
                    500                      505

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<210> 42975  
 <211> 130  
 <212> PRT  
 <213> A.fumigatus

<400> 42975  
 Gln Gln Met Leu Ile Ile Phe Ile Gly Phe His Asp Ile Ile Pro Pro  
 1 5 10 15  
 Asp Leu Ile Ser Ile Phe Asn Glu Gln Glu Leu Glu Leu Ile Ser  
 20 25 30  
 Gly Leu Pro Glu Ile Asp Val Asp Trp Lys Ala Asn Thr Glu Tyr  
 35 40 45  
 His Asn Tyr Ser Ala Ser Ser Pro Gln Ile Gln Trp Phe Trp Arg Ala  
 50 55 60  
 Val Arg Ser Phe Asp Lys Glu Glu Arg Ala Lys Leu Leu Gln Phe Val  
 65 70 75 80  
 Thr Gly Thr Ser Lys Val Pro Leu Asn Gly Phe Lys Glu Leu Glu Gly



## 19369

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |  |  |
| Met | Asn | Gly | Val | Ser | Lys | Phe | Asn | Ile | His | Arg | Asp | Tyr | Gly | Asn | Lys |  |  |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |  |  |
| Asp | Arg | Leu | Pro | Ser | Ser | His | Thr | Cys | Phe | Asn | Arg | Lys | Ser | Ser | Leu |  |  |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |  |  |
| Arg | Asp |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |

&lt;210&gt; 42976

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42976

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Ser | Pro | Ser | Lys | Ala | Phe | Leu | His | Asn | Glu | Ile | Leu | Phe | Leu | Phe | Trp |  |  |  |  |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |  |  |
| Ser | Gln | Asp | Lys | Ile | Ser | Ala | Arg | His | Gln | Asp | Pro | Phe | Lys | Asp | Ile |  |  |  |  |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |  |  |  |  |
| Tyr | Met | Ile | Leu | Ser | Pro | Leu | Ile | Ser | Ser | Tyr | Leu | Gly | Leu | Ile | Gly |  |  |  |  |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |  |  |
| Arg | Tyr | Tyr | Gln | Ala | Asn | Gly | Val | Ala | Leu | Ile | Tyr | Ser | Phe |     |     |  |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |  |

&lt;210&gt; 42977

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42977

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Trp | Phe | Arg | Gly | Leu | Phe | Asp | Ser | Cys | Phe | Leu | Asn | Val | Val | His | Trp |  |  |  |  |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |  |  |
| Leu | Gly | Asp | Asp | Pro | Cys | Gly | Leu | Thr | Phe | Cys | Leu | Leu | Leu | Leu | His |  |  |  |  |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |  |  |
| Leu | Leu | Leu | Thr | Ser | Ser | Val | Phe | Phe | Leu | Leu | Leu | Ala | Phe | Thr | Phe |  |  |  |  |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |  |  |
| Leu | Phe | Leu | Phe | Leu | Ser | Ser | Asp | Ala | Phe | Leu | Thr | Phe | Thr | Leu | Gly |  |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |  |
| Pro | Leu | Phe | Leu | Ser | Ser | Leu | Ala | Leu | Leu | Phe | His | Leu | Phe | Phe | Thr |  |  |  |  |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |  |  |  |  |
| Leu | Leu | Leu | Phe | Leu | Asn | Cys | Gly | Trp | Asn | Lys | Asp | Leu | Gln | Gln | Arg |  |  |  |  |
|     |     | 85  |     |     |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |  |  |
| Ile | Tyr | Asp | Thr | Leu | Cys | Leu | Leu | Asp | Val | Ser | Ala | Ala | Glu | Gln | Asn |  |  |  |  |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |  |  |
| Ala | Ser | Leu | Leu | Leu | Pro | Ala | Thr | Ser | Gly | Gly | Gly | Gln | Ser | Glu | Ala |  |  |  |  |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |  |  |  |  |
| Tyr | Gly | Leu | Arg | Arg | Ile | Val | Ala | Ser | Ser | Arg | Arg | Arg | Ser | Leu | Trp |  |  |  |  |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |  |  |  |  |
| Ser | Ala | Glu | Ala | Glu | Asp | Val | Leu | Asn | Thr | Thr | Ile | Trp | Gln | Asn | Ser |  |  |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |  |  |
| Pro | Pro | Ile | Asp | Val | Asp | Met | Tyr | Pro | Val | Trp | Thr | Ser | Tyr | His | Ala |  |  |  |  |
|     |     | 165 |     |     |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |  |  |
| Glu | Ala | Arg | Ser | Arg | Leu | Ser | Gly | Asn | Cys | Leu | His | Asp | Cys | Val | His |  |  |  |  |
|     | 180 |     |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |  |  |  |  |
| Glu | Ala | Tyr | Arg | Ala | Val | His | Gly | Asn | Lys | Ala | Ser | Gly | Arg | Asp | Arg |  |  |  |  |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |  |  |
| Phe | His | Ala | Met | Asn | Pro | Ile | Gly | Glu | Ser | Phe | Ile | Ala | Gly | Gln | Ala |  |  |  |  |

## 19370

|   |     |     |
|---|-----|-----|
| 210   | 215 | 220 |
| Arg Leu Cys Ser Phe Cys Thr Ser Val Gly Ser Asn Lys Lys Arg Ile |     |     |
| 225   | 230 | 235 |
| Arg Ala Val Val Gly Thr Thr Ser Trp Asp Leu Cys Thr Val Glu Ser |     |     |
|   | 245 | 250 |
| Val Gly Leu Asn Trp Asn Tyr Ala Val Ala Ile Gly His His Ser Gly |     |     |
|   | 260 | 265 |
| Asn Gly Ser Pro Gly Arg Leu Arg Thr Ala Glu Ser Leu Val Met Ser |     |     |
|   | 275 | 280 |
| Thr Val Gln Trp Arg Leu Val Ala Ile Pro Thr Pro Arg Ile Asp     |     |     |
| 290   | 295 | 300 |

&lt;210&gt; 42978

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42978

|   |    |    |
|---|----|----|
| Leu Glu Ile Gly His Asn Leu Ala Pro His Asp Leu Thr Asn Gly Val |    |    |
| 1   | 5  | 10 |
| Phe Val Leu Asp Asp Met Ser Gln Asp Gln His Lys Ser Ala Leu Lys |    |    |
|   | 20 | 25 |
| Phe Phe Val Arg Gly Thr Arg Gln Leu Leu Asn His Asn Glu Glu Ala |    |    |
|   | 35 | 40 |
| Leu Gln Thr Ser Leu Leu Pro Lys Ser Asp Ser Tyr Ala Ala Thr Pro |    |    |
|   | 50 | 55 |
| Ser Glu Asn Asp Glu Asn Ser Thr His Arg Lys Ser                 |    |    |
| 65  | 70 | 75 |

&lt;210&gt; 42979

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42979

|   |     |     |
|---|-----|-----|
| Phe Ser Lys Arg Cys Trp Ala Ile Lys Val Ile Val Pro Ser Ser Lys |     |     |
| 1   | 5   | 10  |
| Pro Trp Tyr Asp Pro Ser Ser Ser Ser Met Pro Ser Asn Ser Ser Ser |     |     |
|   | 20  | 25  |
| Ser Ser Ser Ile Ser Ser Ser Ser Gly Met Leu Ser Ala Ile Cys Thr |     |     |
|   | 35  | 40  |
| Ile Pro Met Ala Thr Arg Ser Leu Thr Ile Val Ile Ile Gln Ile Ile |     |     |
|   | 50  | 55  |
| Ile Asp His Ile Ile Met Ser Ile Ala Glu Thr Ile Ala Leu Lys Ile |     |     |
| 65  | 70  | 75  |
| Leu Asp Thr Ser Arg Gly Phe Ile Gln Asp Thr Glu Gln Val Val Lys |     |     |
|   | 85  | 90  |
| Thr Leu Val Ile Thr Ala Thr Ile Cys Leu Pro Asn Val Gly         |     |     |
|   | 100 | 105 |
|   |     | 110 |

&lt;210&gt; 42980

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42980

## 19371

His Gly His Gly Ser Gly Asp Thr His Asp Asp His Leu Gln Asp Leu  
 1 5 10 15  
 Asp Asp Leu Ser Glu Gly Gln Ile Ser Ala Leu Tyr Arg Thr Phe Phe  
 20 25 30  
 Gly Gln His Gly Asp Arg Arg Lys Arg Ser Lys Arg Thr Gly Tyr Ile  
 35 40 45  
 His Lys Arg Ile Ala Glu Ser Leu Leu Arg Pro Ser Tyr Glu Thr Gln  
 50 55 60  
 Ala Thr Ser Ala Glu His Cys Gln Asp Asn Gly Met Ala Asn Arg Ala  
 65 70 75 80  
 His Thr Gln Arg Ile Leu Glu Glu His Ala Asn Thr His Ala Arg  
 85 90 95

&lt;210&gt; 42981

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42981

His Pro Thr Cys His Ala Met Val Gly Glu Ile Pro Cys Glu Val Pro  
 1 5 10 15  
 Tyr Asp Arg Thr Tyr Lys Ile Val Val Lys Val Phe Gly Leu Leu Val  
 20 25 30  
 Gly Ala Asn Tyr Val Ile Asn Ala Arg Arg Glu Leu Ile Leu Ile Glu  
 35 40 45  
 Met Ser Cys His Lys Ile Gly Arg Gln Leu His Gly Glu Gln Lys Arg  
 50 55 60  
 Arg Ser Lys Ala Ser Arg Lys Gln Ala His Ile Pro Arg Arg Asn Arg  
 65 70 75 80  
 Val Val Asp Ser Leu Tyr Ser Ala Gln Phe Ser Pro Ile Ala Ala Phe  
 85 90 95  
 Ser Ser Val

&lt;210&gt; 42982

&lt;211&gt; 513

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42982

Ser Asn Met Pro Phe Ser Asn Pro Arg Cys Arg Gly Arg Gly Leu Ser  
 1 5 10 15  
 Leu Ser Gln Ser Leu Arg Ala Pro Lys Ser Glu Thr Val Gly Met Met  
 20 25 30  
 Leu Leu Trp Glu Ala Val His Gly Lys Ser Ala Ser Glu Ile Ser Glu  
 35 40 45  
 Met Leu Gln Thr Trp Ala Leu Glu Asp Gln Asn Val Glu Thr Ala Leu  
 50 55 60  
 Thr Val Ser His Ile Asn Asn Leu Ile Gln Tyr Ala Asn Ser Val Lys  
 65 70 75 80  
 Asn Pro Gln Leu Ala Thr Asp Phe Ala Ala Leu Leu Ser Gln Trp Lys  
 85 90 95  
 Val Val Pro Asp Thr Gln Thr Arg Leu Leu Gln Leu Glu Thr Glu Ile  
 100 105 110  
 Ile Ala Gly Asn Glu Arg Arg Thr Met Glu Leu Val Glu Asp Leu Gln  
 115 120 125

Asp Val Gly Ser Phe Thr Leu Glu Asn Leu Pro Leu Met Asn Arg Leu  
 130 135 140  
 Ile Ser Met Leu Cys Leu Leu Gly Lys Asp Asp Ser Leu Tyr Asp Arg  
 145 150 155 160  
 Val Ser Ala Phe Leu Asp Pro Leu Phe Glu Asn Asn Val Arg Leu Glu  
 165 170 175  
 Ala Asp Thr Leu Ala Ala Leu Thr His Leu Leu Leu Tyr Arg His Asp  
 180 185 190  
 Trp Glu Gly Ile Ser Glu Leu Leu Arg Pro Arg Leu Gly Ser Tyr Asp  
 195 200 205  
 Ser Glu Glu Arg Thr Lys Ile Arg Gln Ala Leu Thr Asn Tyr Ile Leu  
 210 215 220  
 Asp Thr Ala Gln Asp Ser Ala Asp Ala Trp Glu Ala Tyr Gly Leu Leu  
 225 230 235 240  
 Gln Val Ala Phe Pro Glu Thr Gly Val Ser Met Arg Thr Asp Ile Met  
 245 250 255  
 Thr Ser Phe Phe Lys Arg Lys Arg Gly Asp Leu Ala Phe Leu Val Phe  
 260 265 270  
 Gly His Met Arg Gln Ala Glu Asp Phe Ala Arg Arg Pro Lys Pro Asp  
 275 280 285  
 Thr Tyr Ala Arg Cys Phe Gln Gly Ile Ala Lys Met Gln Asp Ala Lys  
 290 295 300  
 Asn Leu Glu Leu Val His Asn Met Leu Lys Leu Asp Val Glu Val Asp  
 305 310 315 320  
 Leu Asn Thr Arg Leu Leu Asn Glu Leu Met Leu Ala Tyr Ala Cys Cys  
 325 330 335  
 Asp Met Pro Asp Lys Ser Met Glu Ile Phe Arg Asp Ile Leu Gln Ser  
 340 345 350  
 Gln Glu Gly Pro Ser Thr Arg Thr Ile Phe Ala Phe Phe Arg Met Cys  
 355 360 365  
 Glu Lys His His His Gly Ala Gln Glu Ala Ile Arg Met Met Asp Lys  
 370 375 380  
 Val Lys Leu Leu Glu Ile Glu Val Asp Arg Arg Leu Tyr Thr Ala Tyr  
 385 390 395 400  
 Val Glu Ala Leu Ala Ala Gln Cys Glu Phe Glu Leu Ala Thr Gln Ala  
 405 410 415  
 Ile Asp Gln Met Gln Glu Glu Ile Gly Tyr Pro Pro Thr Tyr Glu Ser  
 420 425 430  
 Tyr Val Thr Leu Pro Leu Thr Asp Pro Tyr Phe Asn Ala Val Val Val  
 435 440 445  
 Ala Thr Leu Leu Thr Val His Leu Leu Gly Leu Ala Ala Phe Thr Met  
 450 455 460  
 Pro Phe Arg Ile Ser Ile Gly Lys Met Arg Ser Lys Ser Gly Pro Lys  
 465 470 475 480  
 Arg Thr Thr Arg Gly Asn Gly His Ser Leu Arg Lys Ser Asn Ala Pro  
 485 490 495  
 Ile Met Lys Arg Ala Ser Ser Leu Ser Trp Ile Ala Asp Asn Ser Gly  
 500 505 510  
 Leu

&lt;210&gt; 42983

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42983

Arg Arg Phe Ser Ser Ala Pro Ser Leu Leu Leu Thr Trp Leu Tyr Glu  
 1 5 10 15  
 Thr Val Ile Leu Leu Leu Gln Thr Ile Leu Lys Lys Ile Lys Glu Lys  
 20 25 30  
 Ser Glu Glu Lys Ile Cys Tyr Ser Ser Ile Thr Arg Asn Leu Phe Thr  
 35 40 45  
 Gln Pro Met Phe Pro Cys Asn Val Asn Ile Asn Val  
 50 55 60

&lt;210&gt; 42984

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42984

Asp Leu Ser Lys Leu Ser Pro Glu Gly Tyr Arg Val Leu Val Asp Glu  
 1 5 10 15  
 Ser Asp Val Lys Leu Pro Ser Gly Glu Val Val Arg Asn Gly Met Leu  
 20 25 30  
 Phe Arg Asn Thr Phe His Leu Arg Ser Asp Gln His Tyr Asp Ile Phe  
 35 40 45  
 Val Pro Cys Gly Gly Arg Pro Glu Ser Ile Asp Leu Ser Thr Val Gly  
 50 55 60  
 Lys Leu Ile Gln Asn Gly Lys Ser Val Ile Pro Tyr Ile Val Glu Gly  
 65 70 75 80  
 Ala Asn Leu Phe Ile Thr Gln Asp Ser Lys Leu Arg Leu Glu Arg Ala  
 85 90 95  
 Gly Cys Ile Leu Phe Lys Asp Ala Ser Ala Asn Lys Gly Gly Val Thr  
 100 105 110  
 Ser Ser Ser Leu Glu Val Leu Ala Ser Leu Ser Phe Asp Asp Lys Glu  
 115 120 125  
 Phe Ala Glu Asn Met Cys Ile Arg Glu Asp Gly Thr Val Pro Gln Phe  
 130 135 140  
 Tyr Ser Asp Tyr Val Lys Gln Val Gln Glu Ile Ile Lys Ser Asn Ala  
 145 150 155 160  
 Thr Leu Glu Phe Glu Ala Ile Trp Arg Glu His Glu Gln Thr Gly Ile  
 165 170 175  
 Leu Arg Ser Val Leu Ser Asp Arg Leu Ser Val Ala Ile Thr Gln Leu  
 180 185 190  
 Asp Glu Glu Leu Gln Lys Thr Asn Leu Trp Asp Asn Val Glu Leu Arg  
 195 200 205  
 Arg Ser Val Leu Ser Asp Ala Leu Pro Lys Leu Leu Leu Asp Lys Ile  
 210 215 220  
 Gly Leu Asp Thr Ile Leu Gln Arg Val Arg Tyr Pro Pro Asn Phe Val  
 225 230 235 240  
 Thr Leu Arg Arg Glu Thr Asp Arg Leu Trp Ile Gly Ser Gly Glu Leu  
 245 250 255  
 Ser Ala Arg Tyr Leu Arg Gln Leu Pro Cys Glu Pro Ile Arg Ile Gln  
 260 265 270  
 Val Arg Lys Gln Ser  
 275

&lt;210&gt; 42985

&lt;211&gt; 101

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (86)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 42985

```

Leu Val Cys Leu Asp Arg Val Phe Gln Arg Arg Arg Leu Pro Asn Arg
1          5          10          15
Gln Lys Phe Leu Glu Asp Gln Lys Ala Gln Gly Glu Ser Arg Ala Leu
          20          25          30
Glu Lys Phe Gln Thr Arg Asp Trp Lys Ala Gly Asp Ile Tyr Ala Pro
          35          40          45
His Asp Leu Ser Pro Ala Glu Met Lys Lys Trp Arg Lys Arg Gln Gly
          50          55          60
Pro Ala Ala Asp Ala Phe Asp Ala Leu Asn Leu Asn Pro Leu Asp Leu
65          70          75          80
Tyr Lys Val Arg Leu Xaa Ile Arg Thr Gln Tyr Ser Arg Ser His Ser
          85          90          95
Asn Ala Lys Ser Gln
          100

```

<210> 42986

<211> 78

<212> PRT

<213> A.fumigatus

<400> 42986

```

Val Ala Asn Gln Thr Leu Phe Pro Pro Gln Asn Phe Ser Ile Met Ser
1          5          10          15
Glu Tyr Met Thr Ala Met Gly Arg Ile Lys His Arg Ser Ala Thr Gly
          20          25          30
Leu Arg Pro Val Asn Gln Arg Lys Ile Ala Lys Ala Ile Arg Arg Ala
          35          40          45
Ile Gly Ile Gly Leu Met Pro Ser Val His Arg His Pro Glu Ile Leu
          50          55          60
Ala Ala Glu Ala Lys Ala Arg Met Glu Gly Thr Pro Ile Tyr
65          70          75

```

<210> 42987

<211> 442

<212> PRT

<213> A.fumigatus

<400> 42987

```

Ser Ser Thr Thr Glu Arg Arg Leu Ser Ser Ile Gln Val Ser Gly Thr
1          5          10          15
Ser Thr Arg Ile Thr Tyr Thr Glu Leu Asp Ser Ala Pro Met Ala Arg
          20          25          30
His Trp Leu Ala Leu Val Pro Ile Glu Arg Ser Gly Ser Thr Thr Gly
          35          40          45
Arg Leu Ala Asn Leu Lys Val Ile Leu Glu Lys Glu Ser Ile Lys Glu
          50          55          60
Val Ser Ser Val Cys His Gly Arg Arg Thr Arg Arg Ser Leu Ser Pro
65          70          75          80

```

## 19375

```

Pro Ser Ala Asp Arg Thr Val Lys Ile Trp Asp Ala Glu Ala Gly Lys
      85                      90                      95
Val Cys Gln Ser Trp Thr Leu Gly Glu Glu Gly Ser Ser Asn Val Arg
      100                    105                    110
Asp Gln Gln Val Gly Val Val Trp Pro Ser Gly Arg Ser Asp Asn Leu
      115                    120                    125
Leu Ile Ser Leu Ser Leu Ser Gly Asp Leu Asn Tyr Leu Val Glu Gly
      130                    135                    140
Thr Pro Glu Pro Arg Gln Val Ile Gln Gly His Gln Lys Ser Ile Thr
      145                    150                    155                    160
Ser Leu Thr Gln Ser Arg Ser Glu Ala Lys Ala Glu Thr Leu Trp Thr
      165                    170                    175
Gly Ser Phe Asp Gly Arg Val Cys Ser Trp Asp Val Ser Thr Gly Ala
      180                    185                    190
Ala Glu Glu Ala Asp Gly Asp Cys His Ser Ala Tyr Val Ala Gly Leu
      195                    200                    205
Ala Ser Thr Pro Glu Gly Thr Gly Arg Ile Tyr Ser Val Ala Trp Asp
      210                    215                    220
Asp Thr Leu Arg Ser Val Asp Val Gly Ala Arg Thr Tyr Thr Gly Ser
      225                    230                    235                    240
Asn Ser Lys Leu Ser Gly Gln Pro Lys Ser Val Ala Ala Gly Asp Ser
      245                    250                    255
Thr Val Leu Val Gly Thr Ser Glu Gly Val Glu Ile Tyr Lys Asp Gly
      260                    265                    270
Lys Lys Thr Gly Asp Phe Lys Pro Lys Ser Thr Val Thr Ala Val Ala
      275                    280                    285
Ala Arg Gly Asn Val Ala Ala Val Gly Gly Glu Asp Ser Thr Val Gln
      290                    295                    300
Ile Cys Glu Ile Ser Asn Ser Ser Leu Ser Pro Lys Thr Asp Ile Lys
      305                    310                    315                    320
Ala Ser Arg Asn Pro Val Ser Ala Leu Ala Phe Ser Pro Asp Gly Ser
      325                    330                    335
Leu Leu Ala Ile Gly Asp Ser Arg Gly Arg Val Leu Val Tyr Gln Val
      340                    345                    350
Ala Asp Gly Arg Leu Val Thr Asp Arg Trp Thr Ala His Thr Ala Arg
      355                    360                    365
Ile Thr Ser Ile Ala Trp Asn Glu Ser Gly Thr Leu Leu Ala Ser Gly
      370                    375                    380
Ser Leu Asp Thr Asn Leu Phe Val Trp Ser Leu Ala Asn Gln Gly Asp
      385                    390                    395                    400
Trp Leu Gln Val Ser Asn Ala His Lys Glu Gly Val Asn Gly Val Ala
      405                    410                    415
Trp Leu Ala Asp Gly Ser Arg Ile Ala Ser Val Gly Ala Asp Ala Ala
      420                    425                    430
Val Lys Ile Trp Lys Val Glu Gly Leu Glu
      435                    440

```

&lt;210&gt; 42988

&lt;211&gt; 467

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42988

```

Leu Phe Tyr Ser Met Gln Leu Arg Gln Ala Thr Phe Val Leu Pro Lys
1           5           10           15
Thr Gly Gln Arg Leu Arg Gly Leu Val Asn Leu Arg Ser Ser His Ile

```





465

&lt;210&gt; 42989

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42989

Trp Lys Asp Cys Thr Glu Gln Pro Leu Arg Gly Pro Thr Val Gly Glu  
 1 5 10 15  
 Gly Val Thr Pro Val Ala Ser Ile Ser Pro Phe Gly Leu Glu Gly Arg  
 20 25 30  
 Gln Thr Pro Pro Thr Lys Arg Pro Glu Lys Pro Pro Ala Lys Glu Arg  
 35 40 45  
 Leu Ser Tyr Arg Ile Trp Lys Ser Leu Gly Val Phe Arg Arg Glu Asp  
 50 55 60  
 Thr Lys Phe Ala Ile Asn Val Gly Thr Gly Ala Ala Leu Tyr Ala Leu  
 65 70 75 80  
 Pro Ala Phe Leu Glu Pro Thr Arg Pro Phe Tyr Ser His Trp Arg Gly  
 85 90 95  
 Glu Trp Gly Leu Leu Ser Tyr Met Leu Val Cys Ser Met Thr Ile Gly  
 100 105 110  
 Ala Ser Asn Thr Thr Gly Tyr Ser Arg Phe Leu Gly Thr Cys Leu Gly  
 115 120 125  
 Ala Ile Cys Ala Ile Thr Ala Trp Tyr Val Thr Asp Gly Asn Val Ser  
 130 135 140  
 Gly Leu Ala Ile Leu Gly Leu Val Met Ala Thr Trp Thr Ser Tyr Ile  
 145 150 155 160  
 Ile Val Val Met Gly Lys Gly Pro Met Gly Arg Phe Ile Met Leu Thr  
 165 170 175  
 Tyr Asn Leu Ser Val Leu Tyr Ala Tyr Ser Leu Thr Gln Arg Glu Gly  
 180 185 190  
 Ser Asp Asp Gln Asp Glu Gly Gly Asp Ser Pro Ile Ile Thr Asp Ile  
 195 200 205  
 Thr Leu His Arg Val Ala Ala Val Leu Ser Gly Cys Ile Trp Gly Ile  
 210 215 220  
 Ile Ile Thr Arg Val Ile Trp Pro Ile Ser Ala Arg Lys Glu Leu Lys  
 225 230 235 240  
 Asn Gly Leu Ser Leu Leu Trp Leu Arg Met Ser Leu Ile Trp Lys Arg  
 245 250 255  
 Tyr Pro Leu Ser Leu Leu Ala Lys Arg Glu Ser Ser Thr Gly Phe Met  
 260 265 270  
 Thr Pro Arg Glu Lys Leu Glu Ile Glu Arg Phe Leu Ser Arg Leu Glu  
 275 280 285  
 Ala Leu Gln Ala Ala Ala Arg Ala Glu Phe Glu Leu Lys Gly Pro Phe  
 290 295 300  
 Pro Asp Ala Ala Tyr Ser Asn Ile Leu Arg Arg Thr Arg Ser Met Val  
 305 310 315 320  
 Asp Ala Phe His Ala Met Asn Leu Glu Met Ile Lys Asn Val Pro Val  
 325 330 335  
 Ser Glu Gly Glu Leu Ala Leu Leu Ser Tyr Thr Ala Gln Glu Arg Glu  
 340 345 350  
 His Leu Ser Ala Arg Ile Ser His Leu Leu Ser Gly Arg Phe Leu Ser  
 355 360 365  
 Ile His Asn Thr Phe Ala Val Phe  
 370 375

<210> 42990  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 42990  
 His Met Thr Val Met Ala Ser Ser Met Lys Leu Glu Tyr Pro Leu Met  
 1 5 10 15  
 Asp Val Leu Pro Asn Ile Glu His Ala Arg Asp Arg Leu Leu Ala Arg  
 20 25 30  
 Ile Phe His Tyr Arg Lys His Pro Gln Ala Ser Gln Leu Thr Thr Asp  
 35 40 45  
 Glu Asp Tyr Ala Leu Leu Tyr Ala Tyr Ser Lys Leu Ser Leu Val Pro  
 50 55 60  
 Ser Thr Thr His Glu Arg Met Gly Ala Leu Trp Ser Cys Ile Leu Gln  
 65 70 75 80  
 Ile Asp Leu Thr

<210> 42991  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 42991  
 Gly Tyr Ile Gly Tyr Ser Met Ala Lys Lys Ser Ile Ala Val Val Met  
 1 5 10 15  
 Arg Gly Ser Thr Thr Ala Thr Asp Ile Leu Asn Asp Val Asp Thr Ile  
 20 25 30  
 Gln Val Thr Thr Thr Leu Ala Gly Val Ser Leu Pro Ser Ser Val Thr  
 35 40 45  
 Ile Met Asn Gly Val Tyr Arg Ser Trp Ala Ala Val Thr Thr Lys Ser  
 50 55 60  
 Ser Pro Met Ser Arg Ala  
 65 70

<210> 42992  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus

<400> 42992  
 Ala Tyr Ala Asn Gly Gln Gln Arg Ser Leu Ala Phe Thr Leu Lys Glu  
 1 5 10 15  
 Ile Phe Lys Glu Ile Pro Phe Thr Pro Ala Pro Asp Tyr Lys Val Ser  
 20 25 30  
 Val Asn Ser Arg Phe His Val Ser Leu Asp Arg Ala Leu Asp Leu Tyr  
 35 40 45  
 Gln Glu Ser Arg Glu Lys Ala Leu Lys Val Ile Tyr Arg Gln Lys Glu  
 50 55 60  
 Leu Leu Gln Ile Gln Thr Pro Glu Val Glu Ala Asp Leu Glu Glu Val  
 65 70 75 80  
 Ser Ala Ser Cys Gly His Phe Ser Phe Ser Leu Leu Glu Phe Gly Glu  
 85 90 95  
 Gln Leu Lys Asp Leu Leu Arg Ile Leu Asp Glu Leu Gln Leu Glu Ala

## 19379

```

          100              105              110
Glu Glu Arg Pro Asn Gly Arg Ser Trp Ser Trp Leu Lys Val Trp Arg
      115              120              125
Trp Arg Thr Ala Gln Thr Gln Asn Thr Lys Pro Leu Asp Ser Gly Lys
      130              135              140
Leu Cys Arg Ser Gly Thr Ser Ala Ser Tyr Leu Leu Gly Pro Asn Gly
145              150              155              160
Lys Ile Val Gln Asn Asn Arg Tyr Gly Gly Gln Arg
              165              170

```

&lt;210&gt; 42993

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42993

```

Val His Thr His Leu Glu His Tyr Phe His Gln Ala Gly Leu Thr Gly
1      5      10      15
Arg Cys Pro Pro Asp Trp Glu Leu Glu Ile Arg Lys Arg Tyr Ala Gln
      20      25      30
Pro Leu Ala Ser Glu Thr Gly Glu Phe Pro Asp Ala Glu Ser Ile His
      35      40      45
Ala Arg Met Ile Pro Ile Cys Tyr Glu Glu Ser Val Val Ser Gly Ala
      50      55      60
Gly Phe Pro Cys Ala Glu Phe Met Ala Ile Ala Thr Glu Thr Phe Val
      65      70      75      80
Lys Glu Val Leu Ser Val Val Phe Ser Arg Thr Arg Cys Asn Gly Pro
      85      90      95
Ser Gly Thr Ile Asn Gly Met Met Met Arg Lys Tyr Arg Gln Gln Leu
      100      105      110
Glu Leu Glu Glu Leu Ala Tyr Thr Arg Gly Glu Ile Val Lys Asp Ser
      115      120      125
Ala Thr Gly Leu Leu Pro Val Glu Ala Arg Glu Ala Arg Asn Arg Lys
      130      135      140
Pro Leu Gly Val Arg Asp Leu Arg Leu Ala Leu Glu Ile Gly Gly Gly
145      150      155      160
Val Leu Ser His Met Pro Leu Ile Val Asp His Ile Met Gly Gly Tyr
      165      170      175
Phe Glu Asp Glu Leu Glu Thr Asp Lys Gln Glu Gln Ile Asp Glu Val
      180      185      190
Ala Asp Arg Ala Asp Asn Asp Ser Arg Pro Ile Gln Phe Thr Asn Glu
      195      200      205
Met Glu Val Glu Asp Asp Ala Glu Met Leu Asp Trp Glu Gly Ala Thr
      210      215      220
Ala Val Asp Arg Ala Gln Leu Gly Ser Leu Leu Asp Glu Cys Leu Ser
225      230      235      240
Leu Ala Ser

```

&lt;210&gt; 42994

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 42994

```

Leu Ile Ile Phe Gly Val Gln Ser Gly Lys Ser Ile Phe Leu Arg Ser

```

## 19380

```

1           5           10           15
Ile Asp Asn Pro Ser Ile Ala Arg Gln Tyr Thr Glu His Lys Ala Gln
      20           25           30
Thr Thr Val Ala Arg Phe Ser Pro Ser Gly Phe Tyr Val Ala Ser Gly
      35           40           45
Asp Ala Thr Gly Leu Val Arg Val Trp Asp Cys Val Gly Glu Gly Thr
      50           55           60
Thr Lys Gly Glu Tyr Ser Ile Val Asn Gly Arg Ile Asn Asp Leu Ala
65           70           75           80
Trp Asp Gly Asp Ser Gln Arg Ile Ile Ala Val Gly Asp Gly Lys Gln
      85           90           95
Arg Tyr Gly His Cys Ile Thr Trp Asp Ser Gly Asn Thr Val Gly Glu
      100          105          110
Ile Tyr Gly His Thr Gln Gln Ile Asn Ser Val Ser Ile Arg Gln Gln
      115          120          125
Arg Pro Leu Arg Ala Ala Ala Gly Asp Asp Lys Asn Leu Val Phe
      130          135          140
Tyr His Gly Ala Pro Phe Lys Phe Asn Thr Gly Ile Arg Asp Lys His
145          150          155          160
Thr Asn Tyr Ile Tyr Gly Val Gly Phe Ser Pro Asp Gly Ser Thr Leu
      165          170          175
Val Ser Val Gly Ala Asp Arg Lys Ile Trp Leu Tyr Asp Gly Lys Thr
      180          185          190
Gly Glu Pro Lys Gly His Ile Gly Glu Gly Glu His Lys Gly Ser Ile
      195          200          205
Phe Ser Val Ser Trp Ser Lys Asp Ser Lys Lys Phe Val Thr Ala Lys
      210          215          220
Arg
225

```

<210> 42995  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

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<400> 42995
Ser His Ala Ser Leu Leu Ala Thr Asp Ile Ser Gln Glu Met Ile Ile
1           5           10           15
Tyr Gly Asn Val Ile Tyr Thr Ile Gly Ser Ile Leu Val Ala Ala Ala
      20           25           30
Thr Thr Val Arg Ser Phe Asn Phe Met Ile Gly Gly Arg Val Ile Leu
      35           40           45
Ala Leu Gly Asp Ile Ala Thr Gln Ile Ala Gln Tyr Lys Met Phe Ser
      50           55           60
Ser Trp Phe Pro Pro Ser Asn Gly Phe Ala Ser Thr Leu Gly Phe Glu
65           70           75           80
Leu Ala Val Gly Lys Val Arg Pro Tyr Leu Ala Leu Val Asn Ile Trp
      85           90           95
Tyr Ala Asn Ala Ser Phe
      100

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<210> 42996  
 <211> 330  
 <212> PRT  
 <213> A.fumigatus

19381

<400> 42996

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Arg Leu Val Ser Arg His Arg Leu Leu Ser Cys Lys Cys His Asn Leu
1          5          10          15
Gln Val Leu Asn Asn Ile Ser Asp Gln Ala Thr Val Tyr Thr Tyr Val
          20          25          30
Asp Pro Gly Gln Thr Ser Tyr Thr Tyr Leu Gly Val Pro Glu Thr Thr
          35          40          45
Ser Leu Leu Thr Gln Gly Phe Thr Ala Lys Thr Tyr Gly Ala Arg Thr
          50          55          60
Gln Cys Gln Leu Ile Ser Ser Lys Cys Thr Leu Gln Asn Ala Ala Ser
65          70          75          80
Ser Val Lys Phe Asn Cys Ser Ala Asp Phe Thr Gly Leu Ile Ser Thr
          85          90          95
Pro Thr Leu Gln Ala Ala Phe Phe Glu Asp Glu Ser Met Ser Lys Asn
          100          105          110
Leu Arg Gly Lys Val Val Ser Asn Tyr Ser Thr Gly Asn Pro Tyr Tyr
          115          120          125
Phe Gly Leu Ala Ser Val Val Asn Leu Ser Gly Gly Lys Thr Pro Asn
          130          135          140
Ser Thr Glu Phe Val Lys Ser Leu His Gly Val Pro Thr Tyr Val Leu
          145          150          155          160
Gly Cys His Thr Thr Ile Tyr Asp Ile Glu Tyr Asp Arg Leu Asn Asn
          165          170          175
Thr Val Thr Arg Phe Gln Pro Ala Ala Ser Asn Thr Ser Val Ser Asn
          180          185          190
Ile Trp Gln Thr Ser Ile Ser Gln Thr Gln Asp Trp Phe Pro Phe Phe
          195          200          205
Gln Gln Ala Ala Gly Thr Ala Ile Phe Ser Asp Thr Ala Glu Glu Phe
          210          215          220
Ala Glu Lys Val Ala Leu Ala Leu Ser Lys Ala Thr Ile Ala Leu Gly
225          230          235          240
Ala Asp Ala Leu Gly Thr Gln Pro Ala Leu Ala Ala Gln Asp Arg Glu
          245          250          255
Thr Leu Leu Val Ala Arg Ile Pro Val Val Pro Leu Val Ala Met Val
          260          265          270
Ala Val Cys Leu Leu Tyr Val Val Cys Gly Leu Val Leu Thr Gly Ile
          275          280          285
Ala Ala Trp Ser Ala Arg Tyr Glu Val Pro Asp Val Glu Ala Arg Leu
          290          295          300
Ser Ile Ala Gly Leu Val Ala Asp Arg Phe Glu Glu Pro Gly Leu Arg
305          310          315          320
Ser Asp Ala Met Phe Ala Glu His Ala Gly
          325          330

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<210> 42997

<211> 156

<212> PRT

<213> A.fumigatus

<400> 42997

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Pro Gly Gln Lys Thr Gly Asn Phe Ala Trp Val Phe Trp Thr Ser Val
1          5          10          15
Phe Met Asn Leu Phe Thr Asn Ala Ala Thr Val Ile Phe Trp Phe Phe
          20          25          30
Asn Arg Tyr Cys Asn Val His Tyr Arg Gly Arg Gln Asp Thr Ala Thr
          35          40          45

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## 19382

Lys Glu Val Leu Thr Glu Lys Asn Lys Lys Phe Glu Leu Gln Lys Met  
 50 55 60  
 Phe Gln Leu His Trp Met Phe Trp Thr Val Met Ala Phe Ser Leu Phe  
 65 70 75 80  
 Gln Thr Ser Thr Ala Ser Val Phe Ser Gln Asn Ala Thr Glu Leu Ala  
 85 90 95  
 Glu Arg Arg Phe Asn Val Asp Ser Ile Thr Ala Gly Trp Tyr Ser Ser  
 100 105 110  
 Leu Ser Gln Tyr Ala Gly Met Met Val Pro His Leu Trp Leu Ser Leu  
 115 120 125  
 Phe Arg Ile Asp Ser Gly Arg Phe Leu Ser Gly Pro Met Phe Gly Cys  
 130 135 140  
 Leu Tyr Arg Cys Pro Arg Glu Pro Arg Gln Cys Leu  
 145 150 155

<210> 42998  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 42998  
 His Ile Pro Val Cys Val Cys Gly Ile Gly Met Phe Leu Ser Met Val  
 1 5 10 15  
 Leu Val Asn Phe Ala Glu Thr Arg Ser Gly Thr Ala Ala Ser Phe Gly  
 20 25 30  
 Ile Tyr Ala Ile Ala Val Ser Leu Gly Pro Thr Ser Ile Ile Asp Ser  
 35 40 45  
 Ile Arg Thr Thr Leu Trp His Gln Ser Val Phe Gly Ser Ala Tyr Ala  
 50 55 60  
 Leu Lys Val Thr Met Asn Asn Ala Tyr Val Leu Phe Ile Ser Ala Tyr  
 65 70 75 80  
 Gln Ile Thr Asp

<210> 42999  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 42999  
 Glu Asp Thr Tyr Ile Pro Arg Met Ser Val Leu Asn Pro Gly Pro Phe  
 1 5 10 15  
 Pro Ser Pro Glu Glu Leu Ile Ser Leu Val Gly Ser Lys Asn Thr Leu  
 20 25 30  
 Leu Arg Asp Pro Leu Phe Leu Thr Val Gln Arg Ser Glu Lys Thr His  
 35 40 45  
 Ser Arg Arg Ser Leu Asp Gly Arg Arg Ala His Leu Arg Ser Leu Glu  
 50 55 60  
 Leu Tyr Arg Arg Leu Asp  
 65 70

<210> 43000  
 <211> 277  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43000

Gln Arg Glu Arg Ser Gly Thr Tyr Ser Thr Glu Pro Gly Val Asp Met  
 1 5 10 15  
 Arg Ala Asn Arg Pro Glu Gln Ala Phe Gln Asn Ala Ser Arg Met Leu  
 20 25 30  
 Gly His Tyr Leu Ala Thr Gln Gln Thr Pro Pro His Gly Leu Leu Val  
 35 40 45  
 Lys Lys Leu Tyr Ile Tyr Lys Ala Val Asp Val Glu Gln Glu Phe Tyr  
 50 55 60  
 Leu Ala Leu Thr Phe Asp Arg Glu Arg Tyr Ser Pro Val Ile Leu Ile  
 65 70 75 80  
 Ser Asp Gln Gly Gly Val Asn Ile Glu Ser Asn Gln Asp Lys Leu His  
 85 90 95  
 Arg Phe Trp Phe Asn Leu Ser Arg Gly Ile Thr Gly Glu Thr Met Ala  
 100 105 110  
 Gly Ile Gln Lys Gln Ser Cys Phe Thr Asp Lys Glu Met Pro Thr Ile  
 115 120 125  
 Glu Ser Ile Ile Arg Gln Met Ile Lys Leu Phe Glu Glu Arg Asp Ala  
 130 135 140  
 Ile Leu Leu Glu Leu Asn Pro Leu Val Arg Thr Pro Glu Gly Ser Phe  
 145 150 155 160  
 Val Cys Leu Asp Ala Lys Phe Glu Phe Asp Asn Ala Ala Gln Phe Arg  
 165 170 175  
 Gln Pro Glu Val Phe Ser Lys Glu Glu Arg Met Pro Gly Phe Glu Asp  
 180 185 190  
 Glu Tyr Glu Ala Gln Met His Gly Leu Val Tyr Ile Arg Leu Asn Gly  
 195 200 205  
 His Ile Gly Asn Ile Val Asn Gly Ala Gly Leu Ala Met Ala Thr Asn  
 210 215 220  
 Asp Leu Ile Asn Leu His Gly Gly Lys Cys Ala Asn Phe Leu Asp Ile  
 225 230 235 240  
 Gly Gly Lys Ala Thr Thr Glu Thr Leu Leu Lys Ala Phe Glu Ile Leu  
 245 250 255  
 Ser Arg Asp Gln Gln Val Arg Gly Ile Phe Val Asn Ile Phe Gly Gly  
 260 265 270  
 Met Cys Thr Pro Thr  
 275

&lt;210&gt; 43001

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43001

Phe Ser Ala Arg Tyr Cys Gln Leu Pro Gln Arg Pro Gly Leu Leu His  
 1 5 10 15  
 Arg Pro Pro Pro Ser Pro Arg Cys Glu Ile Asn Ala Glu Leu Leu Pro  
 20 25 30  
 Gln Ser Ser Gln Asp Thr Thr Leu Thr Ala Leu Ala Gln Leu Gly Ala  
 35 40 45  
 Leu Arg Leu Asn Ala Arg Arg Cys Met Ile Ser Leu Phe Asp Arg His  
 50 55 60  
 Thr Gln Tyr Ile Leu Ala Glu Ser Thr Arg Thr Leu Ser Leu Gln Asp  
 65 70 75 80  
 Asp Arg Val His Val Asp Gly Asp Gly Leu Trp Leu Gly Ser Ser Val  
 85 90 95

## 19384

Ile Pro Lys Glu Asp Gly Ile Cys His Tyr Cys Cys Glu Glu Asp Gln  
 100 105 110  
 Leu Asn Ala Gly Pro Thr Gly Pro Asn Gly Gly Tyr Thr Ala Leu Val  
 115 120 125  
 Ile Pro Asp Met Thr Lys Asp Asp Arg Cys Ser Lys Arg Gln Tyr Val  
 130 135 140  
 Val Asn Ala Pro His Leu Arg Phe Tyr Ala Gly Val Pro Ile Met Ser  
 145 150 155 160  
 Arg Arg Gly Ile Ala Ile Gly Ala Phe Ala Val Ser Asp Gly Gln Pro  
 165 170 175  
 Arg Ala Gly Leu Asp Pro Leu Glu Ile Arg Phe Met Thr Asp Thr Ala  
 180 185 190  
 Ala Ala Val Met Asn His Leu Glu Met Met Arg Ser His Glu Gln Asn  
 195 200 205  
 Arg Arg Gly Ala Asn Met Ile Ala Gly Leu Gly Ser Phe Val Glu Gly  
 210 215 220  
 Ala Thr Leu Pro Ser Ser Ser Leu Arg Arg Pro Val His Pro His Asp  
 225 230 235 240  
 Glu Glu Glu Asp Gln Glu Ser Glu Asn Ser Gln Asn Ile Ile Pro Gln  
 245 250 255  
 Thr Arg Arg His Pro Thr Leu Ala Asp Gly Arg Pro Pro Leu Lys  
 260 265 270  
 Glu Arg Gly Gln His Gly Glu Ala Ala Ala Leu Pro Ser Gly Thr Ala  
 275 280 285  
 Ile Cys Pro Ala Asp Ser Val Glu Gln Lys His Leu  
 290 295 300

&lt;210&gt; 43002

&lt;211&gt; 676

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43002

His Glu Arg Leu Ser Leu Lys Gly Lys Lys Gln Thr Leu Ile Lys Val  
 1 5 10 15  
 Phe Pro Ala Ala Arg Ser Val Thr Met Phe Pro Leu Trp Asp Ser Arg  
 20 25 30  
 Arg Asn Arg Trp Phe Ser Gly Leu Phe Val Trp Thr Ala Ala Pro Arg  
 35 40 45  
 Val Phe Ser Leu Thr Gly Glu Leu Ala Tyr Leu Tyr Ala Phe Ser Asn  
 50 55 60  
 Ser Ile Met Ala Glu Ile His Arg Leu Asp Ile Glu Leu Ala Asn Lys  
 65 70 75 80  
 Ala His Ala Thr Leu Val Gly Ser Ile Ser His Glu Leu Arg Ser Pro  
 85 90 95  
 Leu His Gly Ile Leu Gly Ser Thr Glu Leu Leu Thr Asp Ser Thr Met  
 100 105 110  
 Lys Pro Ala Gln Val Ala Leu Val Asn Thr Ile Glu His Cys Gly Arg  
 115 120 125  
 Ser Leu Leu Asp Ile Ile Asn Asn Met Leu Asp Phe Ala Lys Ile Asn  
 130 135 140  
 Gln Phe Thr Arg Lys Ser Arg Ser Ser Arg Phe Lys Ser Thr His Ala  
 145 150 155 160  
 Leu Arg Arg Arg Pro Gly Leu Pro Ala Gly Ile Ala Phe Lys Asp Lys  
 165 170 175  
 Pro Gly Leu Gly Val Val Asn Leu Ile Ser Asp Val Gln Leu Asp Ala



[illegible]

## 19386

625                      630                      635                      640  
 Lys Phe Pro Tyr Tyr Thr Ala Ser Asn Gly Leu Glu Ala Leu Glu Val  
                          645                      650                      655  
 Tyr Lys Ala Asn Ala Gly Tyr Ile Pro Val Val Leu Met Gly Glu Trp  
                          660                      665                      670  
 Ser Tyr His Cys  
                          675

<210> 43003  
 <211> 82  
 <212> PRT  
 <213> A.fumigatus

<400> 43003  
 Asp Val Glu Ile Ser Glu Phe Cys Thr Ser Gly Arg Asn Pro Ser Pro  
 1                      5                      10                      15  
 Glu Ile Ala Met Ala Gln Glu Arg Glu Phe Tyr Lys Tyr Val Ser Arg  
                          20                      25                      30  
 Ile Tyr Glu Leu Lys Arg Val Arg Ser Ser Asn Ser Val Pro Asp Ile  
                          35                      40                      45  
 Ala Ser Cys Pro Ser Val Arg Val Ser Phe Ile Gly Pro His Leu Pro  
                          50                      55                      60  
 Leu Gly Val Lys Ser Met Arg Asn Cys Phe His Asn His Arg Lys Thr  
 65                      70                      75                      80  
 Pro His

<210> 43004  
 <211> 132  
 <212> PRT  
 <213> A.fumigatus

<400> 43004  
 Arg Gln Trp Lys Ser Arg Phe Ala Ser Ser Lys Lys Glu Thr Arg Asp  
 1                      5                      10                      15  
 Leu Ala Asp Thr Ser Ser Leu Ser Ser Ala Thr Leu Glu Thr Gln Lys  
                          20                      25                      30  
 Leu Glu Glu Ile Asp Leu Lys Asn Leu Cys Arg Arg Gly Lys His Ser  
                          35                      40                      45  
 Ala Gly Gly Lys Phe Ala Gln Asn Ile Lys Val Asn Leu Ser Gln Asp  
                          50                      55                      60  
 Ser Thr Tyr Ser Leu Phe Trp Ser Gln Ser Ser Ile Gln Ile Trp Asp  
 65                      70                      75                      80  
 Val Ser Thr Cys Pro Pro Thr Phe Lys Asp Ala Ile Thr Pro Asp Gly  
                          85                      90                      95  
 Phe Phe Ile Leu Ala Ala Val Thr Gly Thr His Val Ala Tyr Met Thr  
                          100                      105                      110  
 Gly Asp Arg Asp Arg Lys Gln Thr Val Ser Ser Pro Pro Pro Trp Cys  
                          115                      120                      125  
 Gly Asp Arg Ser  
                          130

<210> 43005  
 <211> 289  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43005

Phe Ile Cys Met Trp Gln Leu Trp Ile Gln Ser Leu Glu Arg Met Thr  
 1 5 10 15  
 Thr Arg Pro Val Glu Tyr Arg Val Gly Pro Thr Pro Trp Cys Thr Ser  
 20 25 30  
 Met Thr Val Ser Pro Ser Gly Ser Phe Val Ala Val Gly Phe Asp Lys  
 35 40 45  
 Ser Thr Val Gly Leu Phe Ala Pro Ser Glu Trp Gln Gln Pro Arg Leu  
 50 55 60  
 Tyr Arg Val His Ala Arg Tyr His Gln Asp Cys Lys Asp Cys Pro Pro  
 65 70 75 80  
 Ile Ala Thr Val Ser Phe Ser His Asp Gly Leu Ala Leu Val Cys Ser  
 85 90 95  
 Thr Arg Ser Glu Arg Asn Gly Met Ile Gln Val Phe Leu Ser His Phe  
 100 105 110  
 Pro Phe Ser Glu Phe Gln Glu Val Leu Pro Cys Arg Tyr Arg Val Pro  
 115 120 125  
 Leu Arg Glu Ser Glu Asp Asn Gly Ile Ser Ser Val Leu Phe Gln Pro  
 130 135 140  
 Gly Arg Gly Gly Lys Glu Asp Ile Ile Cys Ile Thr Thr Trp Thr Gln  
 145 150 155 160  
 Ser Gly Val Pro Ile Leu Val His Pro Asn Gly Gly His Arg Thr Glu  
 165 170 175  
 Ile Arg Val Gln Ser Ser Ala Ser Ser Asn His Lys Gly Lys Leu Gly  
 180 185 190  
 Asn Arg Ile Gln Ala Ala Ala Phe Ser Pro Ser Gly His Glu Leu Val  
 195 200 205  
 Leu Ala Asn Asp Lys Gly Tyr Val Tyr Arg Val Ser Asn Leu Ser Ser  
 210 215 220  
 Ile Pro Ile Glu Val Arg Arg Val Ala Thr Ser Lys Glu Phe Thr Thr  
 225 230 235 240  
 Lys Thr Glu Ser Phe Ala Leu Ala Tyr Val His Gln Thr Asp Glu Asp  
 245 250 255  
 Leu Ile Leu Val Ser Trp Ser Asp Ser Ser Lys Gly Val Gly Tyr Val  
 260 265 270  
 Arg Lys Ile Pro Ile Met Thr Thr Val Arg Ala Leu Arg Arg Arg Thr  
 275 280 285  
 Ala

&lt;210&gt; 43006

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43006

His Phe Ser Lys Pro Ile Thr Ser Asn Gln Glu Thr Leu Arg Ile Cys  
 1 5 10 15  
 Leu Arg Ser Cys Ala Ile Ala Asp Gln Leu Ala Glu Thr Tyr Ser Val  
 20 25 30  
 Asn Ala Lys Gly Asp Ser Lys Met Ser His Ala Thr Asp Leu Tyr Pro  
 35 40 45  
 Ser Ile Val Cys Cys Ala Tyr Lys Glu Pro Arg Tyr Ser His Gly Ser  
 50 55 60  
 Gln Glu Leu Gln Tyr Leu Phe Leu Asn Gln Ser Asn Arg Asp His His

## 19388

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Pro | His | Thr | Met | His | Thr | Pro | Thr | Pro | Leu | Thr | Ile | Cys | Thr | Val | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Ala | Leu | Ala | Ser | Cys | Ile | Thr | Thr | Ser | Trp | Ala | Gln | Asp | Ala | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Ile | Lys | Asp | Ser | Thr | Ile | Leu | Arg | Ser | Thr | Val | Ser | Cys | Pro | Asp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Cys | Pro | Glu | Arg | Asn | Cys | Tyr | Lys | Cys | Thr | Leu | Gly | His | Glu | Lys | Thr |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Arg | Ala | Ser | Thr | Gly | Gly | Arg | Gly | Trp | Glu | Arg | Phe | Leu | Ile | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Phe | Lys | Leu | Pro | Ala | Pro | Val | Thr | Asp | Ala | Thr | Lys | Cys | Thr | Val | Gln |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Phe | Pro | Ala | Phe | Val | Arg | Pro | Asn | Pro | Phe | Ala | Val | Asn | Val | Thr | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |
| Ala | Arg | Ala | Leu | Ser | Ser | Asp | Trp | Asp | Glu | Asp | Thr | Val | Asn | Gly | Glu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Asn | Ala | Pro | Glu | Ser | Gly | Asp | Ile | Phe | Thr | Ser | Met | Ser | Leu | Glu | Pro |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Tyr | Glu | Asn | Met | Gln | Ala | Ile | Asp | Ile | Thr | Ala | Ala | Cys | Lys | Gly | Ala |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     | 240 |     |
| Gln | Ala | Asn | Gly | Glu | Phe | Ser | Ile | Tyr | Val | Gly | Thr | Gln | Ser | Asp | Ser |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Val | Glu | Leu | Trp | Ser | Lys | Asp | Ser | Asp | Ala | Pro | Ala | Ile | Leu | His | Val |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |
| Ser | Gly | Ser | Val | Cys | Lys | Ala | Ser |     |     |     |     |     |     |     |     |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     |     |     |     |

&lt;210&gt; 43007

&lt;211&gt; 1678

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43007

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Val | His | Arg | Thr | Val | Leu | Arg | Glu | Met | Ile | Gln | Asn | Ala | Ala |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Asp | Ala | Asn | Ala | Thr | Lys | Val | Thr | Ile | Lys | Phe | Glu | Thr | Leu | Pro | Ser |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Thr | Thr | Val | Pro | Leu | Pro | Ser | Ser | Ala | Asp | Gln | Thr | Thr | Leu | Leu | Lys |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| His | Thr | Ile | Ser | His | His | Thr | Leu | Lys | Arg | Leu | Leu | Ile | Ser | Asn | Asn |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gly | Leu | Pro | Phe | Ser | Glu | Lys | Asp | Trp | Ala | Arg | Leu | Lys | Arg | Ile | Ala |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |     |
| Asp | Gly | Asn | Pro | Asp | Glu | Thr | Lys | Ile | Gly | Ala | Phe | Gly | Val | Gly | Phe |
|     |     | 85  |     |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Tyr | Ser | Val | Phe | Asp | Asp | Cys | Glu | Glu | Pro | Phe | Val | Ser | Ser | Gly | Lys |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Asp | Ala | Met | Ala | Phe | Tyr | Trp | Lys | Gly | Asn | Ala | Leu | Phe | Thr | Arg | Arg |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Leu | Gln | Leu | Ser | Glu | Glu | Ser | Asn | Pro | Glu | Thr | Thr | Phe | Val | Leu | Asp |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr | Arg | Asn | Asp | Thr | Ser | Pro | Val | Pro | Ser | Leu | Met | Gln | Leu | Ser | Gln |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |     |
| Phe | Leu | Ser | Ser | Ser | Leu | Thr | Phe | Val | Ser | Leu | Glu | Ser | Ile | Glu | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |

Trp Leu Asp Asp Trp Asp Leu Leu Arg Leu Val Lys Lys Thr Ala Pro  
 180 185 190  
 Ser Val Asn Leu Thr Ile Pro Lys Asp Ile Glu Thr Lys Thr Pro Gln  
 195 200 205  
 Gly Leu Met Lys Val Thr Gly Ile Thr Arg Glu Val Val Gln Val Asp  
 210 215 220  
 Ala Ala Trp Met Arg Val Val Glu Trp Asn Pro Asn Ala Ser Val Phe  
 225 230 235 240  
 Arg Leu Asp Gly Leu Arg Asp Thr Thr Gly Ser Leu Arg Thr Phe Phe  
 245 250 255  
 Ser Arg Leu Thr Gly Gln Ser Thr Gln Glu Asn Pro Val Lys Thr Glu  
 260 265 270  
 Lys Pro Glu Asn Ile Ile Asp Cys Gly Asp Leu Thr Thr Val Leu Lys  
 275 280 285  
 Ala Ser Val Phe Leu His Ile Ser Thr Ala Ser Ile Gln Cys Ser Val  
 290 295 300  
 Ser His Ser Leu Ser Ser Glu Leu Glu Arg Ala Thr Arg Lys Pro Pro  
 305 310 315 320  
 Pro Lys Arg Thr Thr Leu Ala Ile Leu Thr Pro Ser Tyr Asp Thr Asp  
 325 330 335  
 Val Ala Ser Gly Ala Ser Thr Ser Arg Ser Asp Ile Leu Ser Ser Ile  
 340 345 350  
 Leu Pro Lys Lys Thr Gly Arg Val Phe Ile Gly Phe Pro Thr His Gln  
 355 360 365  
 Thr Thr Gly Leu Asn Ala His Ile Ser Ala Pro Ser Val Ile Pro Thr  
 370 375 380  
 Val Glu Arg Glu Ser Ile Asp Leu Asn Thr Arg Tyr Ile Ser Lys Trp  
 385 390 395 400  
 Asn Leu Glu Met Leu Arg Ala Ala Gly Ile Val Cys Arg Val Ala Trp  
 405 410 415  
 Ser Ala Glu Met Ala Ser Ile Lys Ser Arg Ile Leu Ser Lys Ile Asp  
 420 425 430  
 Ser Ser Lys Ser Ser Lys Ile Arg Lys Gly Asp Ile Val Gly Val Leu  
 435 440 445  
 Pro Glu Ala Ile Tyr Thr Ala Asn Gln Phe Val Phe Arg Glu Ser Thr  
 450 455 460  
 Pro Ser Ser Val Leu Gly Gln Thr Ile Glu Asp Ala Phe Trp Thr Cys  
 465 470 475 480  
 Asn Lys Asn Ala Ser Ile Glu Val Leu Ser Thr Cys Gly Ile Ile Gln  
 485 490 495  
 Ser His Gln Ala Arg Ile Ala Pro Lys Asp Leu Ser Phe Met Asp Ser  
 500 505 510  
 Ile Pro Val Leu Pro Asp Glu Leu Val Ser Gly Ala Lys Asp Phe Val  
 515 520 525  
 Arg Lys Leu Thr Asp Phe Gly Leu Val Ser Glu Val Thr Val Ser Asp  
 530 535 540  
 Ile Lys Arg Glu Leu Glu Ala Ser Thr Leu Arg Pro Gly Gln Val Ile  
 545 550 555 560  
 Glu Phe Leu Gly Trp Leu Ser Arg Lys Ala Thr Ser Gly Gln Leu Asp  
 565 570 575  
 Ser Phe Ser Ile Gln Ser Leu Leu Ser Val Ala Val Ala Asn Asp Glu  
 580 585 590  
 Asp Ser Ser Gly Asn Pro Ser Arg Leu Leu Val Phe Gly Asp Ile Asn  
 595 600 605  
 Asn Phe Leu Asn Pro Gln Arg Ile Pro Val Asp Leu Pro Val Pro Ser  
 610 615 620

## 19390

Ser Val Ile Pro Phe Lys Tyr Ser Lys Ser Leu Ser Lys Gln Glu Leu  
 625 630 635 640  
 Glu Ala Leu Gly Trp Thr Glu Leu Gln Thr Val Pro Trp Ile Arg Trp  
 645 650 655  
 Leu Val Ile Asn Ala Ser Asn Arg Asp Val Leu Pro Leu Glu Gln Asp  
 660 665 670  
 Ile Thr Gln Ser Pro Ser Phe Ser Ala Gln Val Leu Pro Val Leu Ser  
 675 680 685  
 Lys Gln Trp Asp Asn Ser Leu Ser Gln Ser Ser Lys Gln Thr Ile Ile  
 690 695 700  
 Ser Leu Leu Gln Ser Gln Thr Val Ile Pro Thr Lys Leu Gly Met Lys  
 705 710 715 720  
 Arg Pro Ala Glu Thr Tyr Phe Ser Ser Val Arg Leu Phe Asp Asp Leu  
 725 730 735  
 Pro Val Val His Gly Leu Asn Ser Val Lys Glu Lys Phe Leu Met Ala  
 740 745 750  
 Leu Gly Val Arg Lys Thr Val Glu Leu Gly Val Ile Phe Glu Arg Leu  
 755 760 765  
 Leu Asp Asn Pro Gln Ala Ser Asp Gly Lys Ser Asp Asn Gln Arg Lys  
 770 775 780  
 Trp Ser His Val Asp Leu Ile Arg Tyr Leu Ala Ser Val Arg Asp Asp  
 785 790 795 800  
 Ile Pro Ala Asn Asp Ile Lys Arg Leu Lys Asp Thr Ser Ile Cys Thr  
 805 810 815  
 Ala Glu Ala Thr Glu His Ser Lys Pro Ala Gly Gly Lys Arg Tyr Lys  
 820 825 830  
 Ile Ser Glu Leu Phe Glu Pro Lys Gly Ser Leu Arg Asp Leu Gly Leu  
 835 840 845  
 Pro Ile Leu Glu Trp Pro Gly Lys Tyr Gln Pro Ser Ser Asn Glu Gly  
 850 855 860  
 Lys Phe Leu Thr Met Leu Gly Leu Arg Ser Phe Pro Ser Ala Pro Glu  
 865 870 875 880  
 Met Val Asn Val Met Ala Lys Ala Ala Ala Asp Asp Trp Asp Leu  
 885 890 895  
 His Gly Lys Ala Met Ser Tyr Tyr Ile Ser Glu Tyr His Thr Asn Gly  
 900 905 910  
 Tyr Ala Thr Phe Asp Cys Ser Ala Val Asn Val Pro Phe Leu Pro Ile  
 915 920 925  
 Glu Gly Ala Arg Asp Leu Ser Thr Pro Asn Arg Cys Phe Thr Asp Glu  
 930 935 940  
 Gly Ala Thr Leu Phe Gly Phe Lys Ile Leu Arg Arg Asp Leu His Pro  
 945 950 955 960  
 His Ala Ser Lys Phe Gly Val Lys Gln His Ala Ala Met Thr Asn Cys  
 965 970 975  
 Leu Asp Tyr Met Ile Arg His Pro Pro Ser Thr Lys Arg Asp Ala Arg  
 980 985 990  
 Val Leu Phe Lys Tyr Leu Ala Gly Arg Val Ala Glu Leu Ser Ala Arg  
 995 1000 1005  
 Asp Ile Glu Arg Thr Gly Asn Ala Lys Ile Val Pro Ile Ala Ile Arg  
 1010 1015 1020  
 Asp Thr Val Glu Gln Gly Ser Val Val Arg Arg Val Ala Pro Lys Leu  
 1025 1030 1035 1040  
 Cys Tyr Leu Gly Glu Gly Glu Asp Tyr Arg Asp Ile Phe Asp Phe Val  
 1045 1050 1055  
 Asp Phe Gly Gln Glu Ala Asn Leu Phe Leu Met Ala Val Gly Ser Lys  
 1060 1065 1070

## 19391

Arg Glu Pro Thr Lys Thr Glu Leu Ala Tyr Met Leu Val Lys Glu Pro  
 1075 1080 1085  
 Ala Arg Ile Ser Ala Ser Phe Gln Ser Ala Asp Lys Tyr Leu Lys Leu  
 1090 1095 1100  
 Leu Arg Ser Leu Ala Glu His Leu Ala Val Leu Arg Arg Asp Lys Glu  
 1105 1110 1115 1120  
 Leu Phe Thr Glu Met Lys Arg Ser Ala Phe Leu Leu Ala Ser Arg Asp  
 1125 1130 1135  
 Ile Thr Ser Leu Ala Gln Gly Gly Ala Lys Ser Glu Asp Leu Leu Gly  
 1140 1145 1150  
 Ser Asp Asp Asp Glu Val Glu Asp Gln Ser Ile Lys Glu Trp Thr Leu  
 1155 1160 1165  
 Thr Ala Ala Thr Asp Ala Val Val Val Asp Asp Phe Gln Ser Phe Asn  
 1170 1175 1180  
 Leu Phe Lys Glu His Ile Leu Ala Ala Pro Gln Glu Glu Leu Leu Glu  
 1185 1190 1195 1200  
 Asn Phe Tyr Thr Ala Leu Gly Ala Ile Pro Leu Ser Gly Leu Val Glu  
 1205 1210 1215  
 Glu Arg Ala Asn Trp Gly Ala Val Ala His Asp Gln Arg Pro Ala Ala  
 1220 1225 1230  
 Lys Leu His Lys Leu Ile Asn Glu Arg Ser Arg Leu Phe Leu His Asp  
 1235 1240 1245  
 Gln Ser Pro Asp Ser Ile Arg His Asp Val Arg Trp Leu Glu Lys Asn  
 1250 1255 1260  
 Leu Gln Val Gln Val Val Asn Ser Ile Ser Leu Thr Arg Ser Leu Lys  
 1265 1270 1275 1280  
 Gly Arg Arg Val Ser His Thr Gln Lys Arg Ser Ala Ile Ile Thr Gln  
 1285 1290 1295  
 Asn Gly Arg Thr Trp Ile Leu Trp Ile Cys Pro Gly Lys Tyr Asp Leu  
 1300 1305 1310  
 Tyr Glu Ile Ser Gln Ala Leu Val His Leu Ile Leu Val Arg Pro Lys  
 1315 1320 1325  
 Leu His Ser Thr Leu Thr Leu Glu Met Leu Leu Lys Thr Asp Leu Leu  
 1330 1335 1340  
 Glu Leu Lys Ala Arg Gly Tyr Asn Val Glu Arg Ile Leu Lys Gln Lys  
 1345 1350 1355 1360  
 Ala Gln Glu Ala Lys Ile Ala Glu Asp Arg Arg Gln Lys Gln Leu Glu  
 1365 1370 1375  
 Glu Glu Arg Gln Arg Leu Glu Glu Arg Glu Ala Ala Trp Ala Lys Glu  
 1380 1385 1390  
 Gln Ala Gln Leu Gln Ala Gln Glu Arg Glu Met Glu Ala Lys Ser Gln  
 1395 1400 1405  
 Pro Leu Met Pro Gly Asp Phe Pro Asp Ser Pro Asn Asn Lys Gly Ser  
 1410 1415 1420  
 Asn Pro Asn Val Glu Ala Glu Ala Thr Glu Thr Leu Gln Glu Arg Arg  
 1425 1430 1435 1440  
 Pro Arg Gly Leu Phe Ala Asn Leu Thr Lys Arg Phe Gly Leu Glu Gly  
 1445 1450 1455  
 Gly Arg Ser Ser Trp Asn Pro Leu Gly Gly Gln Pro Ser Pro Pro Gln  
 1460 1465 1470  
 Pro Gly Gly Thr Pro Glu His Thr Gly Thr Pro Pro Pro Pro Tyr Ser  
 1475 1480 1485  
 Ala Asp Asp Pro Gln Arg Pro Arg Pro Glu Glu Pro Ala Pro Val His  
 1490 1495 1500  
 Pro Pro His Arg Leu Gln Asn Glu Leu Leu Ser Ala Ile Gln Ala Cys  
 1505 1510 1515 1520

## 19392

Arg Pro His Gly Ser Ser Ser Leu Tyr Ser Arg Pro Glu Thr Asn Glu  
1525 1530 1535  
Val Thr Glu Thr Lys Ser Tyr Cys Asp Glu Lys Pro Ser His Asp Leu  
1540 1545 1550  
Glu Phe Val Ala Thr Leu Pro Cys Gly Ile Asn Val Leu Phe Val Lys  
1555 1560 1565  
Thr Leu Ala Asp Arg Ser Ala Phe Leu Ser Lys Asn Ser Ala Gly Ile  
1570 1575 1580  
Asn Leu Phe Ala Ala Leu Leu Ile Glu Cys Ala Ser Val Phe Ser Leu  
1585 1590 1595 1600  
Arg Lys Asp Ser Leu Ser Val Phe Tyr Asp Pro Gly Gly Lys Thr Ile  
1605 1610 1615  
Ala Phe Asn Arg Ala Gly Ser Ile Phe Cys Asn Tyr Phe Tyr Phe Gln  
1620 1625 1630  
Gln Leu His Glu Lys Glu Leu Leu Gln Asn Gln Ser Ala Asp Arg Ser  
1635 1640 1645  
Glu Ser Met Val Tyr Trp Trp Val Ile Leu Cys His Glu Leu Ala His  
1650 1655 1660  
Asn Leu Val Gly Asp His Ser Ser Ala His Ser Tyr Tyr Arg  
1665 1670 1675

&lt;210&gt; 43008

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43008

Pro Ser Pro Trp Pro Pro His Lys Lys Thr Ser Leu Gln Ser Ser Ala  
1 5 10 15  
Ser Cys Lys Leu Thr Pro Pro Leu Pro Ala Ile Tyr Arg Lys Arg His  
20 25 30  
Ser Leu Leu Asn Asn Lys Leu Ser Thr Pro Ser Met Ala Lys Gly Leu  
35 40 45  
Leu Thr Gln Leu Gln Thr Leu Pro Ala Ala Ala Gln  
50 55 60

&lt;210&gt; 43009

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43009

His Tyr Glu Lys Gln Ser Val Leu Leu Tyr Phe Ala Glu Ser Pro Phe  
1 5 10 15  
Phe Asp Ala Thr Ser Asn Asn Ala Ser Leu Ala Ile Gln Ala Asn Tyr  
20 25 30  
Asn Glu Ala Phe Arg His Phe Val Glu Thr Arg Glu Ala Phe Glu Gly  
35 40 45  
Arg Leu Arg Thr Met Gln Gly Leu Glu Phe Val Val Ala Tyr Asp Pro  
50 55 60  
Leu Gln Ala Ala Ala Gln Thr Asp Thr Gln Phe Ala His Glu Pro Ser  
65 70 75 80  
Asn Val Trp Val Ile Arg Lys Gln Met Arg Arg Lys Arg Ala Gly Gln  
85 90 95  
Glu Asp Glu Val Val Val Leu Ala Thr Phe Phe Val Val Gly Asp Cys  
100 105 110



## 19393

Ile Tyr Met Ala Pro Ser Val Ala Ser Val Val Gly Asn Arg Ile Val  
 115 120 125  
 Arg Arg Arg Trp Phe Cys Phe Ala His Val Arg Lys Gly Met Ala Asp  
 130 135 140  
 Gln Leu Ala Ser Ala Leu Cys Cys His Ile Ala Asn Gln Ser Phe Glu  
 145 150 155 160  
 Asn Arg Leu Asp Ala Ala Asn Leu His Pro Gly Pro Trp Ala Tyr Leu  
 165 170 175  
 Ser Thr Thr Ser Ser Glu Thr Arg  
 180

&lt;210&gt; 43010

&lt;211&gt; 834

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43010

Val Pro Ser Glu Leu Ala Gly His Ser Asn Met Ala Pro Phe Ile Gly  
 1 5 10 15  
 Asp Asp Glu Arg Ala Ser Gly Ser Gly Gln Pro Ser Asp Ser Ser Val  
 20 25 30  
 Asp Ala Pro Ala Arg Arg Asn Val Leu Tyr Ile Asp Ala Tyr Asp Ser  
 35 40 45  
 Phe Ser Tyr Asn Val Val Ala Met Leu Glu Glu Val Leu Asp Val Arg  
 50 55 60  
 Val Ser Val Met Thr Ile Asp Ser Asp Trp Pro Asp Gly Asn Met Val  
 65 70 75 80  
 Glu Tyr Leu Gln His Phe Glu Ala Val Val Leu Gly Pro Gly Pro Gly  
 85 90 95  
 Asp Pro Asn Val Ala Lys Asp Val Gly Ile Met Arg Asp Val Trp Thr  
 100 105 110  
 Leu Ser Gly Ala Asp Met Leu Pro Val Phe Gly Ile Cys Leu Gly Phe  
 115 120 125  
 Gln Ser Leu Cys Leu His Gln Gly Ile Pro Ile Gly Arg Leu Pro Tyr  
 130 135 140  
 Pro Leu His Gly Gln Val His Arg Ile Lys Thr Val Asn Arg Asp Ile  
 145 150 155 160  
 Phe Glu Asn Val Gln Asp Val Glu Val Thr Leu Tyr His Ser Leu Tyr  
 165 170 175  
 Ala Arg Leu Asp Ser Pro Glu Gln Ser Thr Arg Gly Val Asp Ser Gly  
 180 185 190  
 Asn Pro Gln Ala Asp Arg Phe Ala Ser Lys Asp Leu Asp Leu Leu Ala  
 195 200 205  
 Trp Phe Leu Leu Glu Asp Gly Glu Thr Gln Ile Pro Met Ala Val Arg  
 210 215 220  
 His Gln Lys Arg Pro Ile Trp Gly Val Gln Phe His Pro Glu Ser Cys  
 225 230 235 240  
 Lys Ser Asp Arg Glu Ala Cys Val Lys Leu Leu Arg Arg Trp Trp Asp  
 245 250 255  
 Met Ala Leu Asn Tyr Asn Lys Lys Thr Gly Arg Gly Gly Tyr Gly Ile  
 260 265 270  
 Leu Leu Asn Ser Asn His Cys Ala Ser Gly Ser Ile Thr Leu Pro Asp  
 275 280 285  
 Ala Ala Ser Thr Met Leu Asp Trp Ser Thr Ser Thr Ser Ser Cys Ser  
 290 295 300  
 Ser Tyr Arg Thr Phe Thr Ala Arg Asn Leu Asp Ala Glu Val Val Cys

[illegible]

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| 305 | 310 |     |     |     |     |     |     |     |     |     | 315 |     |     |     |     | 320 |  |  |  |  |
| Glu | Asn | Leu | Asn | Ala | Pro | Asn | Ser | Pro | Thr | Val | Leu | Phe | Gln | Ser | Asn |     |  |  |  |  |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |     |  |  |  |  |
| Gly | Arg | Tyr | Ser | Ile | Ile | Ser | Val | Pro | Ser | Pro | Asn | Ser | Trp | Arg | Leu |     |  |  |  |  |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |     |  |  |  |  |
| Glu | Tyr | Tyr | Cys | Glu | Thr | Gln | Ser | Leu | Leu | Leu | Glu | Lys | Leu | Gln | Asp |     |  |  |  |  |
|     |     |     | 355 |     |     |     | 360 |     |     |     |     | 365 |     |     |     |     |  |  |  |  |
| Arg | Arg | Gly | Thr | Glu | Ile | Gly | Pro | Thr | Arg | Gln | Ser | Val | Ala | Glu | Ser |     |  |  |  |  |
|     |     |     | 370 |     |     | 375 |     |     |     |     | 380 |     |     |     |     |     |  |  |  |  |
| Ile | Val | Glu | Arg | Ser | Leu | Thr | Val | Ser | Gln | Phe | Trp | Asp | Val | Leu | Arg |     |  |  |  |  |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |     |  |  |  |  |
| Phe | Val | Thr | Asp | Thr | Lys | Lys | Val | Asp | Ser | Gly | Ser | Leu | Thr | Val | Pro |     |  |  |  |  |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |     |  |  |  |  |
| Phe | Trp | Gly | Gly | Phe | Leu | Gly | Tyr | Phe | Ser | Tyr | Glu | Met | Gly | Leu | Ala |     |  |  |  |  |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |     |  |  |  |  |
| Cys | Leu | Ala | Arg | Pro | Lys | Thr | Ala | Ala | Gly | Ile | His | Thr | Thr | Cys | Glu |     |  |  |  |  |
|     |     |     | 435 |     |     |     | 440 |     |     |     |     | 445 |     |     |     |     |  |  |  |  |
| Asn | Glu | Asn | Ala | Gly | Glu | Asp | Pro | Ala | Asp | Ala | Ser | Leu | Leu | Trp | Thr |     |  |  |  |  |
|     |     |     | 450 |     |     | 455 |     |     |     |     | 460 |     |     |     |     |     |  |  |  |  |
| Glu | Arg | Ser | Ile | Val | Val | Asp | His | Lys | Thr | Gly | Gln | Ile | Thr | Phe | Gln |     |  |  |  |  |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |     |  |  |  |  |
| Ser | Thr | Arg | Val | Asp | Asp | Asp | Leu | Pro | Arg | Gly | Trp | Leu | His | Gln | Ala |     |  |  |  |  |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |     |  |  |  |  |
| Val | Gln | Phe | Leu | Gln | Asp | Leu | Ala | Ile | Thr | Arg | Ser | Gln | Cys | Lys | Val |     |  |  |  |  |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |     |  |  |  |  |
| Tyr | Thr | Ser | Asp | Thr | Thr | Ala | Glu | Phe | Leu | Asp | Ser | Ile | Leu | Lys | Arg |     |  |  |  |  |
|     |     |     | 515 |     |     | 520 |     |     |     |     |     | 525 |     |     |     |     |  |  |  |  |
| Ser | Val | Ile | Lys | Phe | Pro | Thr | Gln | Glu | Asn | Tyr | Gln | Arg | Gln | Ile | Arg |     |  |  |  |  |
|     |     |     | 530 |     |     | 535 |     |     |     |     | 540 |     |     |     |     |     |  |  |  |  |
| Ala | Cys | Gln | Ala | Glu | Leu | Glu | Ala | Gly | Glu | Ser | Tyr | Glu | Leu | Cys | Leu |     |  |  |  |  |
| 545 |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     |     | 560 |     |  |  |  |  |
| Thr | Gly | Glu | Thr | Leu | Ile | Thr | Leu | Pro | Ser | Pro | Val | Ser | Gln | Ser | Gly |     |  |  |  |  |
|     |     |     |     | 565 |     |     |     |     | 570 |     |     |     |     | 575 |     |     |  |  |  |  |
| Arg | Ala | Ser | Phe | Pro | Trp | Glu | Leu | Tyr | Lys | Arg | Leu | Arg | Lys | Tyr | Asn |     |  |  |  |  |
|     |     |     | 580 |     |     |     |     | 585 |     |     |     |     | 590 |     |     |     |  |  |  |  |
| Pro | Ala | Ala | Phe | Ser | Gly | Phe | Ala | Arg | Leu | Gly | His | Val | Lys | Ile | Ala |     |  |  |  |  |
|     |     |     | 595 |     |     |     | 600 |     |     |     |     | 605 |     |     |     |     |  |  |  |  |
| Ser | Ser | Ser | Pro | Glu | Cys | Phe | Leu | Asn | Trp | Asp | Arg | Asp | Ser | Thr | Leu |     |  |  |  |  |
|     |     |     | 610 |     |     | 615 |     |     |     |     | 620 |     |     |     |     |     |  |  |  |  |
| Glu | Met | Lys | Pro | Met | Lys | Gly | Thr | Val | Arg | Lys | Thr | Glu | Asp | Met | Thr |     |  |  |  |  |
| 625 |     |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     | 640 |     |  |  |  |  |
| Met | Glu | Lys | Ala | Arg | Glu | Ile | Leu | Gly | Ser | Thr | Lys | Glu | Met | Ala | Glu |     |  |  |  |  |
|     |     |     |     | 645 |     |     |     |     | 650 |     |     |     |     | 655 |     |     |  |  |  |  |
| Asn | Leu | Met | Ile | Ala | Asp | Leu | Ile | Arg | His | Asp | Leu | Tyr | Gly | Ile | Cys |     |  |  |  |  |
|     |     |     | 660 |     |     |     |     | 665 |     |     |     |     |     |     |     |     |  |  |  |  |

## 19395

755                      760                      765  
 Leu Asp Leu Gly Gly Gly Gly Ser Phe Ser Val Leu Ile Arg Thr Ala  
 770                      775                      780  
 Phe Thr Cys Ser Asn Glu Gln Asp Asp Glu Gln Leu Trp Arg Ile Gly  
 785                      790                      795                      800  
 Ala Gly Gly Ala Val Thr Thr Leu Ser Thr Pro Glu Gly Glu Trp Asp  
 805                      810                      815  
 Glu Met Leu Thr Lys Leu Arg Thr Val Cys Gly Ile Phe Ala Pro Leu  
 820                      825                      830  
 Asn Pro

<210> 43011  
 <211> 265  
 <212> PRT  
 <213> A.fumigatus

<400> 43011  
 Ala Asn Pro Ser Pro Pro Arg His Leu Pro Lys Thr Pro Phe Pro Pro  
 1                      5                      10                      15  
 Lys Gln Gln Ala Leu His Pro Ile His Gly Glu Arg Leu Ile Asn Thr  
 20                      25                      30  
 Val Ala Asn Pro Ser Ser Cys Gly Ser Val Ala Gly Asn Asp Pro Ile  
 35                      40                      45  
 His Met Glu Thr Ala Arg Ala Leu Ala His Glu Phe His Lys Asn Asn  
 50                      55                      60  
 Val Gln Leu Val Tyr Gly Gly Gly Thr Lys Gly Leu Met Gly Glu Leu  
 65                      70                      75                      80  
 Ala Arg Thr Leu Val Ser Leu Ser Gly Pro Gln Ala Val His Gly Val  
 85                      90                      95  
 Ile Pro Arg Ala Leu Val Arg Val Glu Pro Gly Tyr Asp Asn Lys Arg  
 100                      105                      110  
 Glu Glu Glu Lys Pro Thr Ala Ser Ser Gly Lys Ser Ala Glu Arg Thr  
 115                      120                      125  
 Ile Lys Glu Pro Leu Asp Lys Thr Ala Leu Leu Gly Glu Ser Glu Tyr  
 130                      135                      140  
 Gly Ile Thr Thr Ile Val Pro Asp Met His Thr Arg Lys Arg Leu Met  
 145                      150                      155                      160  
 Ala Glu Lys Val Met Ala Gly Gly Pro Gly Ser Gly Phe Val Ser Leu  
 165                      170                      175  
 Ala Gly Gly Phe Gly Thr Ile Glu Glu Val Met Glu Met Thr Thr Trp  
 180                      185                      190  
 Asn Gln Leu Gly Ile His His Leu Gly Ile Val Leu Leu Asn Val His  
 195                      200                      205  
 Gly Tyr Trp Asp Gly Leu Leu Ser Trp Val Gln Ser Ala Val Lys Glu  
 210                      215                      220  
 Gly Tyr Ile Gly Ala Asp Asn Gly Lys Ile Leu Val Glu Ala Lys Asp  
 225                      230                      235                      240  
 Pro Arg Glu Val Leu Pro Lys Leu Leu Glu Tyr Arg Val Ser Asn Gly  
 245                      250                      255  
 Arg Met Asp Leu Asp Trp Gly Gln Glu  
 260                      265

<210> 43012  
 <211> 119  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43012

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Val Leu Ala Ile Gly Phe Leu Leu Val Ile Leu Ser Ser Ala Leu Trp
1           5           10           15
His Asn Phe Leu Pro Leu Ile Val Val Ala Arg Tyr Val Ile Ala Pro
          20           25           30
Val Pro Asn Trp Ile Cys Ala Arg Cys Ala Asn Pro Asp Asp Phe Met
          35           40           45
Asp Ser Ser Gly Asn Ala Val Ala Asp Phe Gly Arg Phe Leu Thr Gly
          50           55           60
Phe Leu Val Leu Met Gly Val Gly Lys Phe Val Gln Ser Asn Ala Ile
65           70           75           80
Leu Leu Pro Leu Ser His Leu His Leu Val Gly Tyr Pro His Tyr Leu
          85           90           95
Phe Cys Lys Phe Leu Ile Arg Val Val Ser Asn Ala Asp Glu Ser Ser
          100          105          110
Pro Ala Gly Arg Ala Cys Ala
          115

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&lt;210&gt; 43013

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43013

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Arg Glu Thr Pro Gln Thr Lys His Gly Lys Glu Phe Ser Phe Ile Ala
1           5           10           15
Ala Trp Leu Ile Phe Ser Arg Pro Phe Glu Asp Gly Glu Thr Lys Val
          20           25           30
Ser Lys Gly Thr Phe Arg Leu Lys Gln Leu Arg Asn Leu Ile Ser Leu
          35           40           45
Ser Thr Cys Trp Leu Arg Val Phe Cys Cys Phe Gly Gly Ala Asn Ala
          50           55           60
Ser Ile Leu Lys Ser Phe Asp Val Ile Arg Arg Asp Val Ile Ala Asn
65           70           75           80
Arg Ser Lys Ile Thr Tyr Glu Ile Asn Val Thr Pro Leu Ser Leu Ile
          85           90           95
Val Ala Leu Ala Ile Gly Ser Leu Gly Val Ile Glu Glu Pro Leu Lys
          100          105          110
Asn Asp Ala Lys Leu Asp Ser Phe Thr Asn Ala Lys Arg His Glu Glu
          115          120          125
Leu Phe Leu Asn Thr Ile Glu Ala Met Asp Asn Trp Glu Val Val Lys
          130          135          140
Gln Pro His
          145

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&lt;210&gt; 43014

&lt;211&gt; 1094

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43014

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Val Pro Pro Val Cys Tyr Pro Val Ala Asp Lys Ser Ser Lys Ala Ile
1           5           10           15
Gln Ser Ser Ala Leu Glu Val Gly Gln Ser Thr Pro Gly Asn Arg Ile

```



## 19398

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 465 |     | 470 |     | 475 |     | 480 |     |     |     |     |     |     |     |     |     |
| Ala | Pro | Thr | Glu | Gly | Thr | Val | Asn | Ile | Thr | Gly | Cys | Ile | Val | Lys | Val |
|     |     |     | 485 |     |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Arg | Tyr | Cys | Arg | Glu | Arg | Lys | Phe | Pro | Ile | Phe | Lys | Asp | Leu | Trp | Lys |
|     |     | 500 |     |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Pro | Glu | Ile | Glu | Met | Lys | Phe | Lys | Arg | Thr | Gly | Leu | Ala | Ala | Lys | Arg |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |
| Pro | Leu | Thr | Asp | Arg | Pro | Leu | Ser | Trp | Ser | Ser | Thr | Thr | Ser | Lys | Asp |
|     | 530 |     |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |
| Gly | Lys | Gln | Gln | Pro | Lys | Lys | Gly | Pro | Gln | Thr | Thr | Ser | Cys | Glu | Ile |
| 545 |     |     |     | 550 |     |     |     |     |     | 555 |     |     |     |     | 560 |
| Lys | Val | Ile | Gly | Gln | Gln | Pro | Asp | Leu | Val | Ile | Glu | Ser | Met | Ser | Leu |
|     |     |     | 565 |     |     |     |     | 570 |     |     |     |     |     | 575 |     |
| Ser | Gln | Ser | Ala | Val | Met | Val | Leu | Glu | Gly | Glu | Thr | Gln | Ser | Phe | Asp |
|     |     | 580 |     |     |     |     | 585 |     |     |     |     | 590 |     |     |     |
| Ile | Thr | Leu | Arg | Asn | Ala | Ser | Ser | Cys | Pro | Leu | Asp | Phe | Ile | Thr | Phe |
|     | 595 |     |     |     |     | 600 |     |     |     |     |     | 605 |     |     |     |
| Thr | Phe | His | Asp | Ser | Thr | Thr | Arg | Gln | Ile | Gln | Ser | Ala | Leu | Thr | Asn |
|     | 610 |     |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |
| Lys | Asp | Leu | Leu | Pro | Val | Glu | Val | Tyr | Glu | Leu | Glu | Leu | Gln | Leu | Ser |
| 625 |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     |     | 640 |
| Met | Lys | Pro | Gly | Leu | Arg | Trp | Arg | Arg | Gln | Gly | Ser | Ser | Pro | Asp | Asn |
|     |     |     | 645 |     |     |     |     |     | 650 |     |     |     |     | 655 |     |
| Leu | Val | Ile | Asp | Ala | Gly | Gln | Ser | Ala | Thr | Phe | Ser | Leu | Asp | Ile | Val |
|     |     | 660 |     |     |     |     |     | 665 |     |     |     |     | 670 |     |     |
| Gly | Lys | Pro | Gly | Leu | Gln | Glu | Thr | Thr | Val | Gln | Ile | Asp | Tyr | Ser | Tyr |
|     |     | 675 |     |     |     |     | 680 |     |     |     |     | 685 |     |     |     |
| Ile | Gly | Leu | Ser | Asn | Gly | Gln | Leu | Pro | Glu | Glu | Phe | Tyr | Thr | Arg | Gln |
|     | 690 |     |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |
| Leu | Phe | Val | Pro | Leu | Thr | Val | Thr | Val | Asn | Ala | Ser | Ile | Glu | Val | Ala |
| 705 |     |     |     | 710 |     |     |     |     | 715 |     |     |     |     |     | 720 |
| Arg | Cys | Asp | Ile | Leu | Pro | Phe | Ser | Ser | Asp | Phe | Ala | Trp | Arg | Asn | Ser |
|     |     | 725 |     |     |     |     |     |     | 730 |     |     |     |     | 735 |     |
| Gln | Glu | Ser | Glu | Leu | Asp | Ser | Val | Gly | Asn | Ser | Ser | Thr | Asp | Gly | Asp |
|     |     | 740 |     |     |     |     |     | 745 |     |     |     |     | 750 |     |     |
| Pro | Phe | Ala | Pro | Val | Leu | Ser | Gln | Leu | Gly | Arg | Gly | Ala | Tyr | Gly | His |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |
| Asp | His | Cys | Ile | Leu | Leu | Leu | Asp | Leu | Arg | Asn | Ala | Trp | Pro | Asn | Pro |
|     | 770 |     |     |     |     | 775 |     |     |     |     | 780 |     |     |     |     |
| Leu | Ser | Val | Thr | Leu | Gln | Val | Ser | Glu | Gln | Pro | Ile | Glu | Glu | Ser | Ser |
| 785 |     |     |     | 790 |     |     |     |     |     | 795 |     |     |     |     | 800 |
| Ala | Glu | Glu | Phe | Thr | Pro | Lys | Val | Gly | Gln | Tyr | Thr | Leu | Thr | Gly | Glu |
|     |     |     | 805 |     |     |     |     |     | 810 |     |     |     |     | 815 |     |
| Leu | Gln | Pro | Gly | Gln | Ile | Ser | Arg | Phe | Val | Leu | Val | Leu | Pro | Cys | Val |
|     |     | 820 |     |     |     |     |     | 825 |     |     |     |     | 830 |     |     |
| Tyr | Val | Asp | Asn | Pro | His | Ala | Pro | Ile | Pro | Val | Leu | Asn | Thr | Gly | Ile |
|     | 835 |     |     |     |     | 840 |     |     |     |     |     | 845 |     |     |     |
| Lys | Arg | Gln | Phe | Val | Val | Ser | Ala | Asn | Lys | Leu | Thr | Phe | Glu | Ala | Glu |
|     | 850 |     |     |     |     | 855 |     |     |     |     | 860 |     |     |     |     |
| Ala | Ala | Ser | Arg | Glu | Ala | Phe | Trp | Phe | Arg | Glu | Glu | Leu | Leu | Lys | Arg |
| 865 |     |     |     | 870 |     |     |     |     |     | 875 |     |     |     |     | 880 |
| Leu | Ser | Gly | Val | Trp | Lys | Glu | Ser | Thr | Thr | Thr | Ser | Gly | His | Lys | Gly |
|     |     |     | 885 |     |     |     |     |     | 890 |     |     |     |     | 895 |     |
| Val | Ile | Glu | Leu | Arg | Gly | Ile | Arg | Met | Asn | Ala | Arg | Met | Val | Asp | Ala |
|     |     | 900 |     |     |     |     |     | 905 |     |     |     |     | 910 |     |     |
| Phe | Arg | Leu | Asp | Ala | Met | Asp | Ile | Ser | Phe | Ser | Leu | Ser | Pro | Pro | Phe |

## 19399

```

          915                920                925
Pro Lys Gln Lys Ala Ser Ser Ala Glu Ser Ile Asp Glu Val Met Gln
   930                935                940
Ile Gly Arg Ser Lys Tyr Lys Val Gln Thr Asp Glu Met Leu Asp Leu
  945                950                955                960
Thr Val Thr Val Arg Asn Arg Ser Ser Lys Pro Ile His Pro Leu Leu
          965                970                975
Arg Leu Gln Pro Ser Leu Arg His Gln Pro Ser Asn Val Ala Leu Asp
          980                985                990
Leu Ser Lys Arg Leu Ala Trp Thr Gly Met Leu Gln Gln Val Leu Pro
          995                1000                1005
Ile Leu Pro Ser Gly Glu Ser Thr Ser Val Thr Ile Gly Val Thr Ile
   1010                1015                1020
Phe Cys His Gly Glu Tyr Glu Val Gly Ala Ser Val Glu Glu Val Arg
  1025                1030                1035                1040
Thr Leu Arg Ser Thr Val Gly Leu Glu Lys Asp His Lys Pro Ala Tyr
          1045                1050                1055
Asp Ala Pro Val Leu His Asp Asp Glu Ala Ile Arg Asp Ser Phe Gly
          1060                1065                1070
Leu Asp Ala Thr Arg Arg Arg Arg Ile Trp His Ala Arg Glu Thr Cys
          1075                1080                1085
Ile Met His Ala Thr Asp
   1090

```

```

<210> 43015
<211> 114
<212> PRT
<213> A.fumigatus

```

```

<400> 43015
Gln Pro Ile Asp Trp Asp Ser Ser Pro Gln Gly Arg Ile Phe Gln Val
 1                5                10                15
Glu Tyr Ala Gln Glu Ala Val Lys Gln Gly Ser Val Val Val Gly Leu
          20                25                30
Val Asn Lys Thr His Ala Val Leu Val Gly Leu Lys Val Arg Thr Asp
          35                40                45
Phe Arg Phe Thr Cys Phe His Ser Gln Gly Ala Ala Asp Met Leu Asn
          50                55                60
Val Tyr Phe Leu Gln Pro Leu Ala Lys Arg Arg Arg Thr Ile Ile Leu
  65                70                75                80
Ser Glu Glu Asp His Arg Ser Arg Leu Pro Tyr Gly His Cys Tyr Arg
          85                90                95
Arg Ser Gly Ile Gly Arg Ser Cys Ala Leu Lys Leu His Glu Ala Thr
          100                105                110
Val Pro

```

```

<210> 43016
<211> 340
<212> PRT
<213> A.fumigatus

```

```

<400> 43016
Leu Ile Phe Leu Leu Asp Met Phe Ser Pro Leu Ala Phe Pro Thr Gly
 1                5                10                15
Met Ile Ile Tyr Asp Leu Thr Phe Ser Val Pro Pro Ile Ser His Leu

```

```
<210> 43017
<211> 212
<212> PRT
<213> A.fumigatus
```

```

<400> 43017
Arg Asn Ala Glu Glu Leu Ser Ser Tyr Gln Lys Lys Ile Ile Glu Val
1                    5                    10                    15
Asp Ser His Met Gly Ile Ala Ile Ala Gly Leu Ala Ser Asp Ala Arg
                20                    25                    30
Val Leu Ser Asn Tyr Met Lys Gln Gln Cys Leu Ser Ser Arg Met Thr
                35                    40                    45
Tyr Gly Arg Pro Leu Pro Val Asp Arg Ile Val Thr Gln Ile Gly Asp
                50                    55                    60

```



## 19401

Arg Ala Gln Thr Asn Thr Gln Gln Tyr Gly Lys Arg Pro Tyr Gly Val  
 65 70 75 80  
 Gly Leu Leu Val Ala Gly Val Asp Glu Ala Gly Pro His Leu Phe Glu  
 85 90 95  
 Phe Gln Pro Ser Gly Met Thr Gln Glu Met Leu Ala Cys Ala Ile Gly  
 100 105 110  
 Ala Arg Ser Gln Met Ala Arg Thr Tyr Leu Glu Arg Asn Leu Asp Lys  
 115 120 125  
 Phe Ala Asp Cys Ser Arg Glu Glu Leu Ile Ser His Gly Leu Arg Ala  
 130 135 140  
 Leu Lys Glu Thr Leu Ser His Asp Lys Glu Leu Thr Val Asp Asn Thr  
 145 150 155 160  
 Ser Val Gly Val Val Gly Leu Ala Gly Glu Gly Ala Gln Gly Lys Ile  
 165 170 175  
 Glu Thr Phe Lys Leu Tyr Asp Gly Gln Ser Ile Ser Pro Leu Leu Glu  
 180 185 190  
 Ala Leu Glu Gln Thr Asp Ser Gly Glu Thr Lys Glu Glu Glu Ser Met  
 195 200 205  
 Glu Val Asp Ser  
 210

&lt;210&gt; 43018

&lt;211&gt; 393

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43018

Thr Thr Pro Ser Leu Pro Val Met Val Gln Lys Arg Ala Ser Gln Gly  
 1 5 10 15  
 Ser Arg Arg Pro Ser Val Thr Ser Val Ser Ser Ser Thr Pro Ile Thr  
 20 25 30  
 Pro Ser Phe Thr Thr Ser Val Ile Thr Thr Thr Asp Lys His Tyr Pro  
 35 40 45  
 His Gln Gln Gln His Arg Asp Ala Arg His Thr Arg Ala Thr Ser Trp  
 50 55 60  
 Thr Ser Gly His Asp Gln Gly Gly Glu Pro Ser Phe Ala Asp Tyr His  
 65 70 75 80  
 Ser Ser Ala Ser His Ser Arg Arg Arg Arg Glu Ser Asn Leu Ser Leu  
 85 90 95  
 Ala Asp Leu Thr Glu Gly Ser Ser Pro Ser Ser Ser Leu Ser Phe Asp  
 100 105 110  
 His Pro Asn Met Ala Met Lys Thr Thr Ser Ser Glu Trp Asn Pro Gly  
 115 120 125  
 His Ala Arg Ser Arg Ser Gln Ser Met Ala Gln Met Asn Ala Ser Gln  
 130 135 140  
 Ala His Ser Ile Ser Asp Pro Ala Pro Arg Pro Gly Pro Val Thr Trp  
 145 150 155 160  
 Met Ser Leu Pro Arg Lys Lys Gln Leu Ala Leu Leu Gly Leu Cys Arg  
 165 170 175  
 Val Phe Asp Phe Leu Gln Ile Ala Ser Leu Gln Ala Tyr Met Phe Tyr  
 180 185 190  
 Gln Leu Lys Ser Phe Asp Glu Thr Leu Ser Asp Ser Asp Val Ser Thr  
 195 200 205  
 Gln Ala Gly Ile Leu Gln Gly Ala Phe Thr Ala Ala Gln Phe Ala Thr  
 210 215 220  
 Ala Ile Pro Trp Gly Arg Val Ala Asp Ala Glu Trp Gly Gly Arg Lys

## 19402

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| 225 |     | 230 |     | 235 |     | 240 |
| Phe | Val | Leu | Leu | Val | Gly | Leu |
|     |     | 245 |     | 250 |     | 255 |
| Val | Ala | Phe | Ser | Thr | Ser | Phe |
|     |     | 260 |     | 265 |     | 270 |
| Gly | Gly | Ala | Ile | Asn | Gly | Thr |
|     |     | 275 |     | 280 |     | 285 |
| Glu | Asn | Val | Lys | Glu | Lys | Lys |
|     |     | 290 |     | 295 |     | 300 |
| Pro | Ile | Gly | Phe | Asn | Ile | Ala |
| 305 |     |     |     | 310 |     | 315 |
| Cys | Phe | His | Cys | Ser | Cys | Leu |
|     |     | 325 |     | 330 |     | 335 |
| Gly | Arg | Tyr | Ala | Cys | Arg | Ser |
|     |     | 340 |     | 345 |     | 350 |
| Pro | Gln | Phe | Leu | Trp | Arg | Cys |
|     |     | 355 |     | 360 |     | 365 |
| Ile | Pro | Leu | Cys | Val | Ala | His |
|     |     | 370 |     | 375 |     | 380 |
| Leu | Arg | Tyr | Val | Cys | Arg | Ser |
| 385 |     |     |     | 390 |     |     |

&lt;210&gt; 43019

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43019

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ala | Pro | Leu | Leu | Thr | Ile | Ala | Ser | Ala | Phe | Asn | Asn | Leu | Trp | Leu |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Phe | Leu | Ser | Thr | Pro | Arg | Tyr | Asp | Ser | Ser | Asp | Pro | Ala | Ser | Pro |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Gln | Arg | Leu | Pro | Phe | Ile | Phe | Thr | Gly | Gly | Leu | Gly | Met | Leu | Pro |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Gln | Ser | Val | Gly | Phe | Ala | Thr | Ala | Ile | Leu | Gly | Ile | Ile | Gly | Met | Leu |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Gln | Phe | Thr | Val | Tyr | Pro | Ser | Ile | Asn | Gly | Arg | Leu | Gly | Thr | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Lys | Ser | Tyr | Gln | Tyr | Phe | Leu | Ser | Leu | Phe | Pro | Leu | Ala | Tyr | Ala | Phe |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Pro | Tyr | Ile | Ala | Leu | Ala | Pro | Ser | Ser | Thr | Pro | Pro | Pro | Gly | Gln |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Asn | Gly | Pro | Trp | Val | Trp | Phe | Ser | Ile | Ile | Val | Val | Leu | Phe | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gln | Val | Ser | Ala | Arg | Thr | Phe | Thr | Leu | Pro | Thr | Ser | Ile | Ile | Leu | Leu |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Asn | Cys | Ser | Pro | His | Pro | Ser | Val | Leu | Gly | Thr | Ile | His | Gly | Ile |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Gln | Ser | Val | Ser | Ala | Phe | Arg | Thr | Ile | Gly | Pro | Ile | Phe | Ser |     |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Gly | Ala | Trp | Tyr | Gly | Tyr | Gly | Leu | Glu | Ile | Gly | Met | Val | Gly | Phe | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

&lt;210&gt; 43020

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43020

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Asp | His | Leu | His | Asp | Leu | Asp | Gly | Asp | Val | Gly | Cys | Asp | Asp | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Asp | Ala | Asp | Ala | Gly | Gly | Gly | Leu | Thr | Ala | Phe | Val | Gln | Glu | Arg |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Gly | Lys | Phe | Ala | Ala | Leu | Asp | Asp | Gly | Arg | Gly | Gly | Val | Leu | Ser | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Lys | Ala | Glu | Ala | Arg | Asn | Glu | Glu | Ala | Glu | Gly | Gly | Gly |     |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43021

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43021

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Asn | Val | Phe | Ile | Met | Pro | Ser | Arg | Lys | Leu | Thr | Trp | Leu | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Gly | Cys | Ser | Ser | Gly | Phe | Gly | Leu | Ser | Leu | Thr | Arg | Thr | Ala | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Ala | Gly | Gly | His | Arg | Val | Ile | Ala | Thr | Ser | Arg | Asn | Pro | Ser | Arg | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Glu | Leu | Val | Ala | Glu | Ile | Glu | Ser | Arg | Gly | Gly | Arg | Trp | Val | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Asp | Val | Asp | Ser | Ala | Gln | Ser | Gly | Asp | Val | Ile | Thr | Glu | Leu | Glu |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Arg | Gly | Gly | Glu | Gln | Ile | Asp | Val | Leu | Val | Asn | Asn | Ala | Gly | Tyr | Ser |
|     |     |     | 85  |     |     |     | 90  |     |     |     |     |     |     | 95  |     |
| Ile | Tyr | Ala | Pro | Ile | Glu | Thr | Ile | Thr | Glu | Glu | Glu | Met | Arg | Ser | Gln |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Met | Glu | Thr | Met | Tyr | Phe | Gly | Pro | Leu | Arg | Leu | Ile | Arg | Ala | Val | Leu |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | His | Met | Arg | Gln | Arg | Arg | Ser | Gly | Val | Ile | Val | Asn | Met | Ser | Ser |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Ala | Ser | Leu | Asp | Gly | Ile | Pro | Thr | Met | Gly | Val | Tyr | Ala | Gly | Ala |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Lys | Ala | Gly | Leu | Asp | Gly | Met | His | Leu | Phe | Leu | Lys | Thr | Val | Pro | Lys |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Gly | Asn | Gln | Leu | Thr | Ala |     |     |     |     |     |     |     |     |     |     |
|     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43022

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43022

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Pro | Leu | Thr | Asp | Leu | Ser | Tyr | Val | Ser | Asp | Leu | Pro | Val | Leu | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Tyr | Pro | Arg | Ile | Tyr | Pro | Glu | Gln | Tyr | Ala | Tyr | Met | Cys | Asp | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Lys | Lys | Thr | Leu | Asp | Ala | Gly | Gly | His | Cys | Val | Leu | Glu | Met | Pro | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Thr | Gly | Lys | Thr | Val | Ser | Leu | Leu | Ser | Leu | Ile | Ile | Ala | Tyr | Gln |

## 19404

50                      55                      60  
 Gln His Tyr Pro Glu His Arg Lys Leu Ile Tyr Cys Ser Arg Thr Met  
 65                      70                      75                      80  
 Ser Glu Ile Glu Lys Ala Leu Ala Glu Leu Lys Glu Leu Met Lys Phe  
                     85                      90                      95  
 Arg Ser Gln Gln Leu Gly Tyr Thr Glu Asp Phe Arg Ala Leu Gly Leu  
                     100                      105                      110  
 Thr Ser Arg Lys Asn Leu Cys Leu His Pro Ser Val Lys Arg Glu Lys  
                     115                      120                      125  
 Ser Gly Thr Val Val Asp Ala Arg Cys Arg Ser Leu Thr Ala Gly Phe  
                     130                      135                      140  
 Val Lys Glu Lys Lys Glu Arg Gly Glu Asp Val Glu Leu Cys Ile Tyr  
 145                      150                      155                      160  
 His Glu Val Cys Ala Asp Val Leu Arg Lys Leu Trp Val Glu Pro Leu  
                     165                      170                      175  
 Thr Phe

<210> 43023  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 43023  
 Asn Leu Asp Leu Leu Glu Pro His Asn Leu Val Pro Pro Gly Val Phe  
 1                      5                      10                      15  
 Thr Leu Asp Gly Leu Leu Lys Tyr Gly Glu Glu His Lys Gln Cys Pro  
                     20                      25                      30  
 Tyr Phe Ser Ala Arg Arg Met Val Ile Tyr Cys Leu Lys Ser Leu Ser  
                     35                      40                      45  
 Val Cys Ala Asn Thr Gly Ser Asp Ala Leu Leu Gln Arg His Tyr Leu  
                     50                      55                      60  
 Phe Leu Ser Leu Pro Pro Arg Ser  
 65                      70

<210> 43024  
 <211> 151  
 <212> PRT  
 <213> A.fumigatus

<400> 43024  
 Phe Tyr Pro Leu Gly Leu Ile Ser Leu Leu Cys Leu Ala Leu Val Lys  
 1                      5                      10                      15  
 Phe Phe Ala Phe Ile Ala Leu Ala Cys Asp Leu Thr Leu Thr Ile Thr  
                     20                      25                      30  
 Val Met Gly Gly Met Leu Ala Asp Pro Val Lys Ser Tyr Pro Arg Leu  
                     35                      40                      45  
 Phe Gly Pro Asn Ser Ser Phe Gly Gly Ala Ser Gly Val Gln Trp Leu  
                     50                      55                      60  
 Met Lys Phe Pro Tyr Ala Leu Pro Met Leu Ala Asn Ala Val Phe Leu  
 65                      70                      75                      80  
 Ser Leu Cys Ala Thr Cys Val Ala Val Gly Leu Glu Glu Val Trp Ser  
                     85                      90                      95  
 Leu Tyr Pro Glu Asp Val Arg Ile Leu Leu Thr Gln Pro Asp Phe Thr  
                     100                      105                      110  
 Ser Leu Gln Gly Lys Ala Trp Pro Gly Arg Phe Arg His Glu Ala Leu

## 19405

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 115 |     | 120 |     | 125 |
| Arg | Pro | Trp | Val | Glu | Gly |
|     | 130 |     |     |     | 135 |
| Gln | Thr | Ser | Ile | Leu | Arg |
| 145 |     |     |     | 150 |     |

<210> 43025  
 <211> 608  
 <212> PRT  
 <213> A.fumigatus

<400> 43025

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Pro | Cys | Arg | Cys | Val | Leu | Thr | Gln | Val | Gln | Met | Pro | Tyr | Cys | Asn |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Val | Ile | Ile | Tyr | Ser | Tyr | His | Tyr | Leu | Asp | Pro | Lys | Ile | Ala | Glu |     |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Arg | Val | Ser | Arg | Glu | Leu | Ser | Lys | Asp | Cys | Ile | Val | Val | Phe | Asp | Glu |
|     |     |     | 35  |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Ala | His | Asn | Ile | Asp | Asn | Val | Cys | Ile | Glu | Ala | Leu | Ser | Ile | Asp | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Glu | Asp | Ser | Leu | Arg | Lys | Ala | Thr | Arg | Gly | Ala | Asn | Asn | Leu | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Arg | Lys | Ile | Ser | Glu | Met | Lys | Ser | Ser | Asp | Ala | Glu | Lys | Leu | Gln | Asn |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Tyr | Ser | Lys | Leu | Val | Glu | Gly | Leu | Arg | Glu | Ala | Glu | Gln | Ala | Arg |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Glu | Asp | Gln | Phe | Ile | Ala | Asn | Pro | Val | Leu | Pro | Asp | Asp | Leu | Leu |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Glu | Ala | Val | Pro | Gly | Asn | Ile | Arg | Arg | Ala | Glu | His | Phe | Val | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Phe | Leu | Lys | Arg | Phe | Ile | Glu | Tyr | Leu | Lys | Thr | Arg | Met | Lys | Val | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| His | Thr | Ile | Ser | Glu | Thr | Pro | Pro | Ser | Phe | Leu | Thr | His | Val | Lys | Asp |
|     |     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |
| Leu | Thr | Phe | Ile | Glu | Arg | Lys | Pro | Leu | Arg | Phe | Cys | Ala | Glu | Arg | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Thr | Ser | Leu | Val | Arg | Thr | Leu | Glu | Leu | Ile | Asn | Ile | Glu | Asp | Tyr | Gln |
|     |     |     | 195 |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Leu | Gln | Glu | Val | Ala | Thr | Phe | Ala | Thr | Leu | Val | Ser | Thr | Tyr | Asp |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Lys | Gly | Phe | Leu | Leu | Ile | Leu | Glu | Pro | Phe | Glu | Ser | Glu | Thr | Ala | Thr |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Val | Pro | Asn | Pro | Val | Leu | His | Phe | Thr | Cys | Leu | Asp | Ala | Ala | Ile | Ala |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Ile | Lys | Pro | Val | Phe | Asp | Arg | Phe | Ser | Ser | Val | Ile | Ile | Thr | Ser | Gly |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Thr | Leu | Ser | Pro | Leu | Glu | Met | Tyr | Pro | Lys | Met | Leu | Gly | Phe | Pro | Thr |
|     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |
| Val | Leu | Gln | Glu | Ser | Tyr | Thr | Met | Thr | Leu | Ala | Arg | Arg | Ser | Phe | Leu |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Pro | Met | Ile | Val | Thr | Arg | Gly | Ser | Asp | Gln | Ala | Gln | Ile | Ser | Ser | Ser |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Phe | Gln | Ile | Arg | Asn | Asp | Pro | Gly | Val | Val | Arg | Asn | Tyr | Gly | Asn | Ile |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Val | Leu | Glu | Phe | Ser | Arg | Ile | Thr | Pro | Asp | Gly | Ile | Val | Val | Phe | Phe |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |

## 19406

```

Pro Ser Tyr Leu Tyr Met Glu Ser Ile Ile Ser Met Trp Gln Gly Met
    355                      360                      365
Gly Ile Leu Asp Ser Ile Trp Asn Tyr Lys Leu Ile Leu Val Glu Thr
    370                      375                      380
Pro Asp Ala Gln Glu Ser Ser Leu Ala Leu Glu Thr Tyr Arg Thr Ala
385                      390                      395                      400
Cys Cys Asn Gly Arg Gly Ala Ile Leu Phe Cys Val Ala Arg Gly Lys
    405                      410                      415
Val Ser Glu Gly Ile Asp Phe Asp His His Tyr Gly Arg Ala Val Leu
    420                      425                      430
Cys Ile Gly Val Pro Phe Gln Tyr Thr Glu Ser Arg Ile Leu Lys Ala
    435                      440                      445
Arg Leu Glu Phe Leu Arg Glu Asn Tyr Arg Ile Arg Glu Asn Asp Phe
    450                      455                      460
Leu Ser Phe Asp Ala Met Arg His Ala Ala Gln Cys Leu Gly Arg Val
465                      470                      475                      480
Leu Arg Gly Lys Asp Asp Tyr Gly Ile Met Val Leu Ala Asp Arg Arg
    485                      490                      495
Phe Gln Lys Lys Arg Asn Gln Leu Pro Lys Trp Ile Ser Gln Ala Met
    500                      505                      510
Leu Glu Ser Glu Thr Asn Leu Ser Thr Asp Met Ala Val Ala Thr Ala
    515                      520                      525
Lys Asn Phe Leu Arg Thr Met Ala Gln Pro Phe Lys Ala Lys Asp Gln
    530                      535                      540
Glu Gly Ile Ser Thr Trp Ser Leu Ala Asp Ile Glu Arg His Arg Glu
545                      550                      555                      560
Lys Gln Met Leu Glu Glu Glu Arg Val Arg Arg Glu Ala Val Ala Asn
    565                      570                      575
Gly Arg Ala Thr Asn Gly Thr His Asn Gly Ala Ser Ala Ala Asp
    580                      585                      590
Glu Phe Asp Asp Ile Asp Glu Asp Leu Met Met Leu Asp Ala Gln
    595                      600                      605

```

&lt;210&gt; 43026

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43026

```

Ser Arg Met Ala Ser Arg Leu Thr Pro Ser Val Met Thr Cys Ala Gly
1          5          10          15
Ser Pro Leu Thr Gly Ser Ala Ser Thr Tyr Val Gln Leu Pro Arg Pro
    20          25          30
Gly Ile Asp Trp Met Thr Ala Leu Arg Ala Ala Ser Ser Thr Arg Gly
    35          40          45
Arg Arg Arg Ser Leu Gly Val Glu Met Ser Tyr Cys Ser Cys Thr Thr
    50          55          60
His Asp Val Pro Leu Leu Gly Leu Asn Leu Asn Cys Val Thr Ser Pro
65          70          75          80
Tyr Leu Pro Leu Met Ser Ser Ser Arg Asn Leu Val Ser Phe Val Ser
    85          90          95
Ser Ser Val Ser Ser Ser Glu Ser Ser Met Ser Thr Ser Glu Ser Trp
    100          105          110
Arg Arg Ser Ser Pro Leu Ser Ser Ser Ser Ser Ser Ser Thr Ala
    115          120          125
Ser Cys Cys Arg Thr Met Ser Ile Ser Ser Cys Ser Gly Pro Ser Tyr

```

## 19407

130                      135                      140  
 Glu Thr Trp Phe Asp Arg Phe Trp Pro Arg Leu His Pro Gln Gly Leu  
 145                      150                      155                      160  
 Ala Thr Ile Arg Ala  
                     165

<210> 43027  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

<400> 43027  
 Pro Asn Gln Thr Ser Gln Ala Cys Lys Gly Lys Pro Gly Leu Gly Ala  
 1                      5                      10                      15  
 Phe Ala Met Arg Leu Phe Ala Arg Gly Leu Lys Ala Val Val Pro Ser  
                     20                      25                      30  
 Ser Ser Pro Leu Tyr Ser Arg Leu Pro Phe Ser Asp Tyr Asp Glu Glu  
                     35                      40                      45  
 Gly Pro Leu Leu Ser Arg Pro Asn Asp Pro Thr Glu Ser Tyr Glu Leu  
                     50                      55                      60  
 Glu Glu Lys Ala Ala Lys Pro Thr Arg His Ala Arg Val Leu Pro Phe  
 65                      70                      75                      80  
 Arg Arg Ile Trp Thr Lys Asn Val Leu Cys Thr Leu Leu Ala Gln Ala  
                     85                      90                      95  
 Phe Phe Asp Phe Gln Met Gly Tyr Val Ser Leu Ser Pro Asp Ile Ala  
                     100                      105                      110  
 Arg Thr Phe Val Asp Asp Cys Gln Cys Leu Gln Gln Ser Met Val Ala  
                     115                      120                      125  
 Phe Pro Ile His Pro Ser Leu  
                     130                      135

<210> 43028  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 43028  
 Thr Pro Cys Pro Ser Ala Arg Arg Ala Cys Arg Ala Ala Trp Ser Ala  
 1                      5                      10                      15  
 Arg Ala Arg His Ala Gly Ser Ala Ala Thr Arg Arg Arg Ser Arg Arg  
                     20                      25                      30  
 Arg Leu Arg Arg Ala Leu Arg Gln Cys Ser Ser Gly Ser Ala Pro Arg  
                     35                      40                      45  
 Arg Ser Arg Arg Arg Leu Pro Pro Pro Arg Ser Cys Gly Leu Gly Pro  
                     50                      55                      60  
 Ala Tyr Phe Pro Arg Cys Leu Val Ser Ala Ser Ser Thr His Pro Leu  
 65                      70                      75                      80  
 Pro Lys Met Lys Thr Pro Gly Met Thr Trp Thr Arg Tyr Pro His Leu  
                     85                      90                      95  
 Gln Met Thr Arg Pro Glu Gly Glu Cys Asp Arg Ala Arg Ala Ser Ala  
                     100                      105                      110  
 Leu Pro Ser Pro Leu Ser Gly Pro Pro Trp Arg Asp Ser Ala Arg Gly  
                     115                      120                      125  
 Arg Pro Ser Pro Arg Thr Gln Ala Asp Arg Gly His  
                     130                      135                      140

<210> 43029  
 <211> 150  
 <212> PRT  
 <213> A.fumigatus

<400> 43029

```

Gly Trp Phe Gly Trp Tyr Ala Ser Leu Ser Gln Asn Ser Ser Lys Gly
1          5          10          15
Gln Ser Ala Asn Arg Ile Ala Leu Thr Lys Ile Leu Ala Lys Glu Val
          20          25          30
Ala Pro Phe Asn Ile Arg Thr Leu Thr Val Val Leu Gly Thr Phe Asn
          35          40          45
Thr Asn Met Ile Asn Ser Ile Val Leu Gly Lys Thr Pro Leu Pro Glu
          50          55          60
Asp Tyr Lys Gly Thr Phe Thr Gly Gln Val Gln Gly Leu Leu Leu Asn
65          70          75          80
Gly Lys Ile Lys Pro Asn Gly Asp Lys Asp Ala Ala Met Gln Ala Val
          85          90          95
Tyr Gln Val Val Val Gly Glu Gly Val Gly Glu Gly His Glu Ala Glu
          100          105          110
Lys Leu Leu Pro Leu Gly Ser Asp Met Thr Pro Arg Leu Lys Gly Val
          115          120          125
Gln Asp Tyr Leu Gly His Ala Leu Glu Val Phe Gly Ser Val Thr Asn
          130          135          140
Ser Val Asp Val Asp Lys
145          150

```

<210> 43030  
 <211> 286  
 <212> PRT  
 <213> A.fumigatus

<400> 43030

```

Arg Arg Gly Gln Asn Arg Ser Asn Gln Val Ser Tyr Glu Gly Pro Glu
1          5          10          15
Gln Glu Glu Ile Asp Met Val Arg Gln Gln Asp Ala Val Glu Asp Asp
          20          25          30
Glu Asp Glu Asp Glu Ser Gly Glu Asp Arg Arg Gln Asp Ser Asp Val
          35          40          45
Asp Met Asp Asp Ser Asp Glu Glu Thr Asp Glu Glu Thr Lys Asp Thr
          50          55          60
Lys Leu Arg Glu Glu Asp Ile Lys Gly Lys Tyr Gly Glu Val Thr Gln
65          70          75          80
Phe Lys Phe Asn Pro Ser Lys Gly Thr Ser Cys Val Val Gln Leu Gln
          85          90          95
Tyr Asp Ile Ser Thr Pro Lys Leu Leu Leu Pro Leu Val Glu Glu
          100          105          110
Ala Ala Arg Ser Ala Val Ile Gln Ser Ile Pro Gly Leu Gly Asn Cys
          115          120          125
Thr Tyr Val Glu Ala Asp Pro Val Lys Gly Glu Pro Ala His Val Ile
          130          135          140
Thr Glu Gly Val Asn Leu Leu Ala Met Arg Asp Tyr Gln Asp Ile Ile
145          150          155          160
Lys Pro His Ser Ile Tyr Thr Asn Ser Ile His His Met Leu Met Leu
          165          170          175
Tyr Gly Val Glu Ala Ala Arg Ala Ser Ile Val Arg Glu Met Ser Asp

```



```
<210> 43031
<211> 182
<212> PRT
<213> A.fumigatus
```

```
<210> 43032
<211> 142
<212> PRT
<213> A.fumigatus
```

<400> 43032

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ile | Thr | Pro | Leu | Pro | His | Ile | Thr | Met | Ser | Lys | Lys | Phe | Lys | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Ala | Ser | Ser | Ser | Arg | Ala | Ala | Ala | Gly | Ala | Tyr | Gly | Ser | Phe | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Phe | Ser | Ser | Ala | Phe | Ser | Ser | Ala | Gly | Arg | Ala | Pro | Ser | Ser | Leu |

```
<210> 43033
<211> 255
<212> PRT
<213> A.fumigatus
```

```
<210> 43034
<211> 63
<212> PRT
```

&lt;213&gt; A.fumigatus

&lt;400&gt; 43034

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ile | Asp | Leu | Leu | Ala | Thr | Pro | Phe | Glu | Leu | Arg | Asp | His | Val | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Leu | Gly | Ala | Val | Asn | Val | Gln | Leu | His | Pro | Ser | Ala | Pro | Ser | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Asn | Leu | Gly | Asp | Gln | Leu | Arg | Gly | Ala | Arg | Arg | Val | Ala | Gly | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Tyr | Asp | Pro | Val | Pro | Ala | Gly | Gln | Gly | Gly | Ala | Cys | Glu | Gly |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |

&lt;210&gt; 43035

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43035

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Asp | Thr | Asn | Thr | Asn | Thr | Ala | Ser | Lys | Thr | Arg | Leu | Thr | Ser | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Arg | Leu | Leu | Ile | Pro | Arg | Leu | Arg | Leu | Leu | Gln | Arg | Lys | Asp | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Ser | Ser | Val | Ile | Gln | Arg | Arg | Glu | Leu | Ala | Thr | Leu | Leu | Asp | Glu |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Arg | Glu | Ser | Ser | Ala | Arg | Ile | Arg | Val | Glu | Asn | Val | Ile | Ala | Thr |
|     |     | 50  |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Asp | Ile | Ala | Val | Glu | Val | Met | Glu | Met | Val | Glu | Leu | Tyr | Cys | Glu | Leu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Leu | Ala | Arg | Val | Asn | Val | Leu | Asp | Gln | Leu | Ala | Phe | Gly | Glu | Lys |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Gly | Ala | Arg | Ala | Arg | Ser | Arg | Ala | Lys | Glu | Ala | Leu | Lys | Ala | Glu | Met |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Ala | Gln | Lys | His | Gly | His | Gly | His | Thr | His | Pro | Gln | Asp | Ala | Ser |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser | Gly | Gly | Gly | Asp | Thr | Ala | Ser | Lys | Ser | Phe | Leu | Gly | Phe | Ser | Phe |
|     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Trp | Ala | Gly | Gly | Gly | Ser | Lys | Lys | Gln | Thr | Pro | Asn | Ile | Ser | Glu | Ser |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Thr | Pro | Gly | Arg | Gly | Arg | Lys | Thr | Glu | Ala | Glu | Glu | Ala | Ala | Asp | Glu |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Asn | Asp | Glu | Glu | Gln | Thr | Pro | Ser | Tyr | Ile | Asp | Ala | Ala | Leu | Asp | Glu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ala | Ala | Ala | Val | Ile | Phe | Tyr | Ala | Trp | Pro | Arg | Phe | Pro | His | Asp | Val |
|     |     |     | 195 |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Arg | Glu | Leu | Thr | Met | Leu | Arg | Gly | Met | Leu | Ala | Glu | Arg | Trp | Gly | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Glu | Phe | Met | Thr | Leu | Ala | Gln | Asp | Asn | Lys | Leu | Val | Asp | Val | Arg | Val |
| 225 |     |     |     |     | 230 |     |     |     | 235 |     |     |     |     | 240 |     |
| Pro | Glu | Arg | Leu | Val | Lys | Gly | Leu | Arg | Val | Lys | Pro | Pro | Ala | Gln | Glu |
|     |     |     |     | 245 |     |     |     | 250 |     |     |     |     |     | 255 |     |
| Leu | Val | Glu | Ser | Tyr | Leu | Arg | Glu | Ile | Ala | Lys | Ala | Tyr | Gly | Ser | Ser |
|     |     |     | 260 |     |     |     | 265 |     |     |     |     |     | 270 |     |     |
| Trp | Gly | Ala | Gln | Ala | Gln | Ser | Gln | Ser | Gln | Ser | Glu | Ser | Glu | Leu | Gly |
|     |     | 275 |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |
| Glu | Ala | Pro | Arg | Glu | Phe | Val | Gly | Asp | Arg | Pro | Gly | Asp | Thr | Asp | Gln |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |

## 19412

Pro Gly Asp Gly Asp Gly Asp Gly Asp Ala Ala Val Pro Ser Thr Gln  
 305 310 315 320  
 Thr Arg Pro Val Asn Met Ala Glu Ala Arg Arg Ala Ser Glu Thr Ser  
 325 330 335  
 Glu Leu Asn Lys Ala Thr Pro Pro Arg Gly Phe Gln Ser Val Lys Ser  
 340 345 350  
 Pro Val Ser Val Ala Pro Pro Gly Pro Arg Ser Asp Asn Pro Asn Pro  
 355 360 365  
 Arg Val Lys Val Pro Gly Ser Glu Ile Gln Ser Glu Thr Gln Val Glu  
 370 375 380  
 Glu Pro Pro Arg Ala Arg Asn Gly Asn Ala Gly Gly Ser Gly Gly Ile  
 385 390 395 400  
 Pro Glu Leu Asp Glu Leu Ala Arg Arg Phe Ala Ala Leu Arg Arg  
 405 410 415

<210> 43036  
 <211> 176  
 <212> PRT  
 <213> A.fumigatus

<400> 43036  
 Lys Met Met Lys Met Lys Thr Lys Val Ala Arg Thr Val Ala Arg Ile  
 1 5 10 15  
 Leu Thr Ser Thr Trp Thr Thr Pro Thr Lys Lys Gln Thr Arg Arg Arg  
 20 25 30  
 Lys Thr Pro Asn Cys Ala Arg Arg Thr Leu Arg Ala Asn Met Ala Lys  
 35 40 45  
 Ser His Ser Ser Ser Ser Thr Pro Ala Lys Ala His His Ala Leu Cys  
 50 55 60  
 Ser Cys Ser Met Thr Ser Pro Pro Pro Ser Ser Ser Ser Cys Leu Trp  
 65 70 75 80  
 Ser Lys Arg Pro Leu Ala Ala Pro Ser Ser Ser Leu Ser Leu Ala Ser  
 85 90 95  
 Ala Thr Ala Arg Met Trp Arg Arg Thr Gln Ser Arg Ala Ser Leu His  
 100 105 110  
 Met Ser Ser Pro Arg Val Ser Thr Cys Leu Pro Cys Ala Ile Thr Arg  
 115 120 125  
 Ile Ser Ser Ser Leu Thr Pro Ser Thr Pro Thr Arg Ser Ile Ile Cys  
 130 135 140  
 Ser Cys Ser Thr Val Ser Arg Pro Arg Ala His Leu Ser Cys Glu Lys  
 145 150 155 160  
 Cys Pro Thr Phe Ser Arg Ala Thr Val Ser Pro Ser Thr Thr Ala Ile  
 165 170 175

<210> 43037  
 <211> 176  
 <212> PRT  
 <213> A.fumigatus

<400> 43037  
 Glu Phe Asp Val Asp Cys Ile Ser Gln Ile Lys Ile Tyr Pro Arg Ala  
 1 5 10 15  
 Ser Ile Asp Leu Ser Arg Arg Val Arg Gln Thr Ala His Ser Ala Gln  
 20 25 30  
 Gly Ser Ile Ala Ser Val Val Gly Lys Arg Ile Ala Pro Tyr Leu Pro  
 35 40 45

19413

```

Lys Val Ile Gly Ala Trp Leu Ala Gly Phe Tyr Asp Asn Asp Arg Pro
 50          55          60
Val His Arg Ala Ala Leu Glu Ser Phe Met Leu Val Phe Thr Thr Glu
 65          70          75          80
Glu Lys Arg Asn Gly Val Trp Lys Val Tyr Gln Ser Ser Ile Leu Asp
          85          90          95
Phe Val Asp Asp Val Ile Leu Gln Gln Thr Pro Gln Thr Leu Ser Asp
          100          105          110
Glu Arg Thr Val Lys Pro Asp Asp Ala Glu Ala Lys Tyr Ala Arg Val
          115          120          125
Val Gly Thr Ala Leu Leu Leu Leu Asn Arg Val Ile Gly Val Tyr Ile
          130          135          140
Ile Ser Gln Asn Cys Ser Pro Val Leu Thr Leu Phe Ser Lys Phe Asn
          145          150          155          160
Ser Arg Arg Pro Pro Lys Gly Ser Gly His Gly Arg Glu Ser Thr Glu
          165          170          175

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<210> 43038

<211> 496

<212> PRT

<213> A.fumigatus

<400> 43038

```

Met Phe Ala Gly Ser Asn Phe Ser Thr Thr Ala Ile Val Gly Gly Arg
 1          5          10          15
Leu Leu Arg Lys Asp Tyr Val Phe Gln Glu Thr Pro Ser Ile His Pro
          20          25          30
Glu Arg Leu Pro Gly Arg Arg Gly Leu Leu Leu Val Asn Leu Arg Gln
          35          40          45
Leu Leu Gln Ile Ile Pro Val Lys Val Leu Ala Lys Thr Asp Pro Gln
          50          55          60
Ala Ser Thr Cys Arg Met Ile Gly Leu Ser Ser Ala Thr Leu Leu Thr
 65          70          75          80
Glu Ala Phe Gln Leu Gly Val Asn Ser Arg Glu Glu Pro Arg Gln Asn
          85          90          95
Gln Ala Leu Gly Trp Lys Ser Tyr Ile Glu Thr Gly Ile Trp Leu Thr
          100          105          110
Ser Ser Leu Pro Asp Ser Asp Arg Asp Ala Phe Leu His Thr Arg Leu
          115          120          125
Ser Pro Leu Val Thr Gln Tyr Val Arg Ala Glu Gln Asn Ala Pro Gln
          130          135          140
Trp Thr Leu Pro Asn Gln Asn Ala Val Ala Leu Cys Thr Glu Tyr Ser
          145          150          155          160
Val Ala Leu Ala Asn Gly Asn Tyr Gly Ser Glu Phe Gln Arg Leu Trp
          165          170          175
Thr Asp Leu Ala Asp Gly Leu Leu Lys Ser Val Lys Leu Ser Ala Pro
          180          185          190
Glu Gln Ser Lys Glu Phe Arg Ser Ser Gln Asp Ala Val Cys Ala Gln
          195          200          205
Ala Glu Arg Leu Phe Ala Leu Glu Ala Ser Val Leu Ala Ser Val Ala
          210          215          220
Asp Ser Glu Ala Arg Ala Ser Val Ser Asn Ile Leu Ser Lys Thr Asn
          225          230          235          240
Leu Pro Leu Leu Asp Asn Cys Leu Gln Val Leu Arg Ser Arg Asn Gly
          245          250          255
Lys Pro Tyr Ala Ala Ala Ala Val Val Glu Glu Met Ile Arg Asn Ala

```

## 19414

|   |   |                                 |     |  |     |
|---|---|---------------------------------|-----|--|-----|
|   | 260   |                                 | 265 |  | 270 |
| Ala Asp   | Ile Ala Gln Gln Ser Arg                             | Glu Leu Ala Asp Phe Val Gln Asn |     |  |     |
|   | 275   | 280                             | 285 |  |     |
| Asp Ala Pro   | Glu Leu Leu Ser Ser Pro Ser Ala Asp Arg Leu Val Ser |                                 |     |  |     |
|   | 290   | 295                             | 300 |  |     |
| Val Ile Leu Ser   | Cys Arg Ser Trp Asp Gly Phe Gly Ser Ser Phe Asp     |                                 |     |  |     |
| 305   | 310   | 315                             | 320 |  |     |
| Thr Val Val Glu Arg Val Ala Glu Ser Glu Pro Glu Gln Ser Asn Thr |   |                                 |     |  |     |
|   | 325   | 330                             | 335 |  |     |
| His Ala Val Gln Lys Leu Leu Ser Thr Leu Asp Phe Lys Glu Val His |   |                                 |     |  |     |
|   | 340   | 345                             | 350 |  |     |
| Asp Lys Thr Gly Leu Asp Ser Leu Ile Lys Arg Ala Leu Asp Gln Ala |   |                                 |     |  |     |
|   | 355   | 360                             | 365 |  |     |
| Cys Arg Gly Ser Arg Phe His Trp Pro Ile Val Ile Ala Ala Leu Gln |   |                                 |     |  |     |
|   | 370   | 375                             | 380 |  |     |
| Asn Gln Thr Ser His Gly Glu Leu Thr Asp Ser Ile Phe Leu Ile Ile |   |                                 |     |  |     |
| 385   | 390   | 395                             | 400 |  |     |
| Val Asp Ser Leu Ser Glu Pro Thr Lys Val Phe Glu Ala Leu His Gly |   |                                 |     |  |     |
|   | 405   | 410                             | 415 |  |     |
| Leu Ser Gln Ile Ala Lys Ser Val Pro Asp Ala Leu Ser Lys Phe Gln |   |                                 |     |  |     |
|   | 420   | 425                             | 430 |  |     |
| Ala Gly Ala His Gly Ser Lys Leu Ala Gly Arg Leu Leu Phe Leu Ala |   |                                 |     |  |     |
|   | 435   | 440                             | 445 |  |     |
| Glu Thr Ser Asp Glu Glu Val Ala Ser Leu Ala Glu Ser Val Leu Thr |   |                                 |     |  |     |
|   | 450   | 455                             | 460 |  |     |
| Glu Phe Lys Glu Ile Gly Val Gly Glu Thr Ser Ala Lys Ser Ser Phe |   |                                 |     |  |     |
| 465   | 470   | 475                             | 480 |  |     |
| Glu Leu Leu Gln Tyr Asn Phe Asp His Val Asn Glu Glu Ser Leu Ser |   |                                 |     |  |     |
|   | 485   | 490                             | 495 |  |     |

&lt;210&gt; 43039

&lt;211&gt; 473

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43039

|   |
|---|
| His Leu Ser Arg Ile Gly Ser Leu Leu Ser Ile Ala Glu Asp Leu Leu |
| 1 5 10 15   |
| Gly Ala Ala Asp Pro Glu Ala Arg Ala Ser Ile Ala Lys Asp Ile Leu |
| 20 25 30  |
| Pro Ser Arg Gln Thr Trp Glu Thr Ala Leu Arg Pro Phe Leu Glu Leu |
| 35 40 45  |
| Pro Pro Arg Pro Ser Thr Ala Ile Thr Ser Pro Leu Gly Gly Thr Val |
| 50 55 60  |
| His Leu Val Asn Pro Glu Ile Ser Asp Thr Leu Lys Glu Gln Tyr His |
| 65 70 75 80   |
| Thr Ile Pro Arg Asp Ser Ser Gly Cys Ser Ser Ala Phe Arg Leu Ala |
| 85 90 95  |
| Tyr Phe Thr Ile Arg Val Leu Ser Ser Phe Asp Ile Met Gly Asn Leu |
| 100 105 110   |
| Ser Ala Glu Glu Gln Glu Thr Leu Phe His Tyr Ile Pro Leu Ala Val |
| 115 120 125   |
| Gln Leu Ile Asp Asp Asp Leu Ser Ile Glu Asn Cys Asn Gly Ile Thr |
| 130 135 140   |
| Gly Leu Thr His Ser Asp Gln Arg Glu Glu Tyr Leu Glu Ile Val Tyr |
| 145 150 155 160   |

## 19415

Asp Gly Arg Lys Val Met Asn Gln Trp Thr Gly Ser Asp Gly Arg Gln  
 165 170 175  
 Ser Glu Ala Asn Ala Thr Val Ala Leu Arg Thr Leu Ser Phe Trp Gln  
 180 185 190  
 Asn Lys Leu Glu Ala Leu Asn Asn Thr Ser Pro Thr Asp Tyr Arg Ile  
 195 200 205  
 Gly Glu Ala Phe Val Arg Leu Met Asn Ser Leu Asp Ser Ala Asn Lys  
 210 215 220  
 Ser Lys Ser Thr Glu Asp Ile Thr Asn Ile Cys Arg Glu Met Arg Ser  
 225 230 235 240  
 Ala Asn Ala Ile Arg Ser Ala Ser Trp Val Ala Val Leu Arg Glu Ser  
 245 250 255  
 Ile Leu Gly Asn Pro Thr Gly Asn Arg Leu Cys Asn Glu Leu Val Ala  
 260 265 270  
 Asp Ser Thr Gly Leu Lys Pro Gln Asp Glu Lys Lys Glu Gly Arg Leu  
 275 280 285  
 Pro Ile Gly Ser Ser Leu Gly Asp Ser Thr Asp Ala Leu Gln Gly Leu  
 290 295 300  
 Arg Lys Leu Ser Leu Leu Asn Leu Leu Leu Ala Gly Glu Ile Asn Val  
 305 310 315 320  
 Ala Ser Thr Ile Pro Thr Gln Arg Leu Val Phe Leu Val Lys His Leu  
 325 330 335  
 Ile Gln Cys Leu Gln Ser Lys Asp Leu Pro Leu Asn Ile Gln Ala Glu  
 340 345 350  
 Ile Met His Thr Leu Thr Phe Val Leu Pro Tyr Leu Asn Glu Ile Tyr  
 355 360 365  
 Gly Ser His Trp Glu Asp Cys Met Glu Ala Leu Ser Thr Val Trp Arg  
 370 375 380  
 Glu Thr Ser Gly Gly Asp Glu Ala Leu Pro Leu Leu Leu Gly Ser Phe  
 385 390 395 400  
 Arg Leu Phe Ala Ser Leu Arg Ser Ile Val Ala Glu Glu Asp Ser Asn  
 405 410 415  
 Asp Asp Val Lys Asp Ala Trp Ser Glu Arg Lys Thr Val Leu Phe Asn  
 420 425 430  
 Gly Leu Ala Ser Thr Leu Thr Lys Phe Gly Glu Leu Glu Cys Ile Pro  
 435 440 445  
 Arg Ile Glu Met Cys Asn Gly Leu Ile Leu Ser Arg Leu His His Cys  
 450 455 460  
 Phe Pro Ser Ala Pro Arg Cys Tyr Arg  
 465 470

&lt;210&gt; 43040

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43040

Pro Leu Cys Gln Arg Gly Met Pro Gln His Ala Phe Glu Tyr Thr Ile  
 1 5 10 15  
 Lys Gln Leu Leu Ile Phe Ile Gln Lys Ser Leu Pro Val Gln Glu Gln  
 20 25 30  
 Tyr Val Ala Ser Ile Lys Asp Ser Asp Ser Leu Gly Pro Leu Leu Glu  
 35 40 45  
 Phe Met Phe Asp Phe Leu Gln Gln Pro Asn Asn Lys Leu Val Asp Ala  
 50 55 60  
 Ser Lys Phe Asp Ile Arg Ser Phe Glu Pro Asp Gln Ser Glu Thr Gln

## 19416

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Glu | Lys | Glu | Ala | Pro | Asn | Gly | Phe | Trp | Ser | Thr | Tyr | Thr | Phe | Cys | Val |
|     |     | 85  |     |     |     |     |     |     | 90  |     |     |     |     | 95  |     |

<210> 43041  
 <211> 175  
 <212> PRT  
 <213> A.fumigatus

<400> 43041

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Glu | Ile | Ser | Pro | Leu | Ile | Ile | Glu | Asp | Ser | Leu | Lys | Gly | Val | Asn |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Lys | Trp | Met | Thr | Thr | Gln | Asp | Pro | Asn | Glu | Glu | Arg | Ala | Leu | Ser | Val |
|     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |     |
| Lys | Ile | Ser | Pro | Lys | Thr | Ala | Glu | Ile | Ile | Ala | Ser | Ile | Pro | Val | Asp |
|     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |     |
| Glu | Glu | Ser | Pro | Pro | Val | Ala | Leu | Ser | Ile | Ser | Leu | Pro | Pro | Ala | Tyr |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Pro | Leu | Gln | Pro | Ala | Leu | Val | Val | Gly | Arg | Ser | Arg | Val | Leu | Val | Asp |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |     |
| Glu | Arg | Lys | Trp | Lys | Ser | Trp | Leu | Leu | Thr | Ile | Gln | Gly | Val | Ile | Met |
|     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Phe | Ser | Asn | Gly | Asn | Leu | Val | Asp | Gly | Leu | Met | Ala | Phe | Arg | Lys | Asn |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Val | Gln | Gly | Ala | Leu | Lys | Gly | Gln | Ser | Glu | Cys | Ala | Ile | Cys | Tyr | Ser |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Val | Ile | Ser | Thr | Asp | Met | Gln | Thr | Pro | Asn | Lys | Arg | Cys | Ala | Thr | Cys |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Lys | Asn | Thr | Phe | His | Ser | Val | Cys | Leu | Phe | Arg | Trp | Phe | Lys | Ser | Ser |
| 145 |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |     |
| Asn | Gln | Ser | Thr | Cys | Pro | Leu | Cys | Arg | Asn | Asn | Phe | Val | Tyr | Val |     |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |

<210> 43042  
 <211> 138  
 <212> PRT  
 <213> A.fumigatus

<400> 43042

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | Asp | Leu | Gly | Thr | Thr | Val | Val | Arg | Met | Arg | Phe | Asp | Met | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Ser | Gly | Ala | Ser | Ala | Leu | Leu | Trp | Phe | Val | Ala | Ser | Val | Glu | Ala | Ser |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Lys | His | Ala | His | Arg | His | Gln | Met | Arg | Asn | Glu | His | Ser | Ala | Val | His |
|     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |     |
| Ser | Val | Ala | Glu | Val | Gly | Ala | Pro | Leu | Glu | Lys | Arg | Gly | Gly | Lys | Cys |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gln | Phe | Pro | Thr | Asp | Ala | Gly | Leu | Val | Ala | Val | Thr | Pro | Asn | Met | Lys |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |     |
| Asn | Ala | Gly | Trp | Ala | Met | Ser | Pro | Asp | Gln | Ala | Cys | Glu | Pro | Gly | Asn |
|     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Tyr | Cys | Pro | Tyr | Ala | Cys | Pro | Pro | Gly | Gln | Val | Ser | Met | Gln | Trp | Asp |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Pro | Glu | Ala | Thr | Ser | Tyr | Ser | Tyr | Pro | Lys | Ser | Met | Val | Ser | Phe | Pro |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Leu | Gly | Gly | Phe | Ile | Pro | Thr | Gly | Arg | Ser |     |     |     |     |     |     |



130

135

<210> 43043  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43043  
 Asn Gly Gly Leu Tyr Cys Asp Lys Asn Gly Gln Ile Lys Lys Pro Phe  
 1 5 10 15  
 Pro Asp Lys Pro Tyr Cys Gln Asp Gly Thr Gly Ala Val Gly Ala Lys  
 20 25 30  
 Asn Lys Cys Ser Lys Gln Val Ala Ile Cys Gln Thr Val Leu Pro Gly  
 35 40 45  
 Asn Glu Ala Met Leu Ile Pro Thr Leu Val Glu Asp Thr Ala Thr Leu  
 50 55 60  
 Ala Val Pro Asp Leu Ser Tyr Trp Cys Glu Thr Ala Ala Gln  
 65 70 75

<210> 43044  
 <211> 298  
 <212> PRT  
 <213> A.fumigatus

<400> 43044  
 Val His Pro Val Arg Ile Leu Leu Ser His Leu Val Leu Thr Val Val  
 1 5 10 15  
 Ser Phe Tyr Ile Asn Pro Pro Gly Tyr Asp Thr Glu Thr Ala Cys Val  
 20 25 30  
 Trp Gly Thr Ser Ala Lys Pro Ile Gly Asn Trp Ser Pro Tyr Val Ala  
 35 40 45  
 Gly Ala Asn Thr Asp Gly Asp Gly Asn Thr Phe Val Lys Ile Gly Trp  
 50 55 60  
 Asn Pro Ile Tyr Leu Glu Pro Thr Thr Pro Phe Arg Asp Val Val Pro  
 65 70 75 80  
 Asp Phe Gly Ile Glu Ile Glu Cys Glu Gly Asp Gly Cys Asn Gly Leu  
 85 90 95  
 Pro Cys Lys Ile Asp Pro Ala Val Asn Ala Val Asn Glu Met Ile Gly  
 100 105 110  
 Ser Thr Ser Val Gly Ala Gly Gly Ala Thr Phe Cys Val Val Thr Val  
 115 120 125  
 Pro Lys Gly Glu Lys Ala Asn Val Val Val Phe Glu Lys Ser Gly Gly  
 130 135 140  
 Gly Ser Gly Ser Ser Gly Gly Asp Asp Asp Ser His Ser Thr Thr Ala  
 145 150 155 160  
 Ala Pro Ser Lys Pro Ser Ser Thr Thr Arg Thr Thr Ser Ser Ser Ile  
 165 170 175  
 Glu Ser Ser Ser Thr Ser Thr Ser Ala Ser Ser Ser Ser Lys Pro  
 180 185 190  
 Thr Asp Thr Asp Ser Ser Ser Ser Ser Ala Thr Val Thr Pro Ser Ala  
 195 200 205  
 Ser Ser Asp Pro Ser Ser Ser Ala Lys Ala Ser Ser Ala Gly Gln Ala  
 210 215 220  
 Ser Glu Ser Gly Thr Phe Ser Tyr Thr Tyr Lys Pro His Val Phe Val  
 225 230 235 240  
 Glu Gln Ser Val Ser Val Gln Ala Met Ala Asp Glu Thr Ala Gly Pro

[illegible]

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<210> 43045
<211> 129
<212> PRT
<213> A.fumigatus
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<210> 43046
<211> 136
<212> PRT
<213> A.fumigatus
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43046 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Pro         | Val | Gly | Gly | Ser | Pro | Leu | Gly | Arg | Pro | Ala | Ala | Gly | Arg | Gln | Gly |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg         | Ala | Pro | Trp | Thr | Asp | Ala | Gly | Arg | Ala | Thr | His | Ser | Gln | Gly | Thr |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly         | Gly | Asp | Pro | Phe | Gly | Arg | Gly | Pro | Pro | Trp | Asp | Arg | His | Arg | Val |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu         | Lys | His | Pro | Asp | Gly | His | Gly | Lys | Arg | Pro | Gln | Val | Thr | Asn | Trp |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala         | Gly | Arg | Ala | Pro | Pro | Cys | Ser | Ala | Arg | Lys | Thr | Pro | Arg | Pro | Pro |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg         | Gly | His | Leu | Gln | Arg | Thr | Pro | Pro | Trp | Ala | Val | Pro | Pro | Gln | Arg |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

## 19419

Asp Ser Gly Tyr Gly Pro Pro Gly Gly Phe Pro Pro Val Gly Glu Ser  
                   100                  105                  110  
 Pro Asn Xaa Pro Pro Ser Leu Pro Phe Phe Phe Cys Cys Asn Leu Pro  
                   115                  120                  125  
 Pro Leu Leu Pro Pro Glu Val Leu  
                   130                  135

&lt;210&gt; 43047

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43047

Tyr Gly Val Gly Trp Gly Phe Arg Pro Asp Pro Leu Val Arg Phe Gly  
 1                  5                  10                  15  
 Trp Gln Lys Pro Ser Pro Ser Thr Gly Pro Gly Arg Pro Arg Gly Val  
                   20                  25                  30  
 Leu Arg Gly Gly Pro Gly His Leu Ser Pro Glu Thr Arg Gly Gly His  
                   35                  40                  45  
 Arg Gly Thr Ala Gly Pro Leu Gly Ile Ser Thr Ser Met Asp Ser Arg  
                   50                  55                  60  
 Gln Leu Ala Arg Pro Arg Trp Pro Ala Gly Thr Pro Gly Arg Arg Arg  
 65                  70                  75                  80  
 Arg Leu Val Thr Lys Gly Ser Asp Gln Leu Ala Gly Ala His Gly Arg  
                   85                  90                  95  
 Thr Gly Gly Ala Arg Ser Ala Gly Ala Gly Gly Pro Pro Pro Gly Thr  
                   100                  105                  110  
 Thr Phe Gly Pro Gly Asn Val Cys Ala His Asp Asp Gly Pro Gly Glu  
                   115                  120                  125  
 Val Gly Gly Tyr Val  
                   130

&lt;210&gt; 43048

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43048

Ala Arg Ala Leu Glu Ala Ser Arg Glu Ser Arg Ala Arg Gly Arg Arg  
 1                  5                  10                  15  
 Arg Glu Gly Glu Glu Gly Glu Glu Gly Glu Ala Arg Arg Arg Ala Arg  
                   20                  25                  30  
 Gly Gly Gln Leu Ala Gly Arg Val Gly Ala Ala Gly Gly Ala Ala Arg  
                   35                  40                  45  
 Ala Gly Gly Arg Val Thr Ser Trp Arg Glu Pro Leu Gly Gln Ala Gly  
                   50                  55                  60  
 Arg Arg Gln Ala Arg Ala Arg Ala Met Asp Arg Arg Trp Pro Ser Asp  
 65                  70                  75                  80  
 Thr Leu Ala Gly Thr Gly Gly Asp Gln Leu Ala Gly Ala Arg Gln Gly  
                   85                  90                  95  
 Pro Thr Pro Gly Arg Glu Thr Pro Arg Arg Thr Arg Glu Ala Pro Glu  
                   100                  105                  110  
 Val Thr Ser Trp Pro Ala Arg Ala Arg Pro Cys Arg His Arg Arg Ala  
                   115                  120                  125  
 Ala Arg Arg Leu Arg Gly His Leu Gln Arg His Ala His Gly Arg Arg  
                   130                  135                  140

## 19420

Pro Arg Arg Met Pro Ala Trp Pro Ala Gly Gly Ile His Pro Trp Gly  
 145 150 155 160  
 Tyr Ala Asp Thr His Pro Ser Ile His Ile Tyr Met Cys Ile Cys Thr  
 165 170 175  
 Arg Ile Pro Pro Arg His Leu His Gly Gly Arg Ser Ala Trp Pro Thr  
 180 185 190  
 Gly Ala Ile  
 195

&lt;210&gt; 43049

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43049

Pro Ala Ser Glu Leu Pro Ile His Pro Ser Arg Tyr Thr Asp Arg His  
 1 5 10 15  
 Thr Asp Pro Ala Ala Asp Ile Gly Arg Ala Arg Ala Pro Cys Arg Ser  
 20 25 30  
 Glu Arg Trp Ala Ala Arg Ala Glu Gly Thr Gly Gly Gln Ala Gly Ala  
 35 40 45  
 Gly Phe Glu Gly Arg Pro Ala Leu Arg Ala Arg Asp Gly Ala Ser Asp  
 50 55 60  
 Gln Val Pro Leu Arg Pro Lys Gln Arg Ala Asn Leu Arg Gly Pro Leu  
 65 70 75 80  
 Cys Met Gly Ala Arg Ala Asn Ala Arg Thr Thr Pro Tyr Arg Met Gly  
 85 90 95  
 Pro Pro Pro Ala Arg Ser Gly Pro Gly Asn Val Cys Thr His Asp His  
 100 105 110  
 Gly Pro Val Glu Val Gly Gly Ser Met Trp Lys Ala Arg Ala Ala Ser  
 115 120 125  
 Pro Leu Val Ala Cys Glu Leu Cys Ala Gly His Phe Phe Pro Ala Arg  
 130 135 140  
 Gln Ala Ala Ser Leu  
 145

&lt;210&gt; 43050

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43050

Trp Ala Gly Arg Gly Arg Trp Val Cys Val Gly Glu Gly Pro Pro Ala  
 1 5 10 15  
 Ala Arg Ala Arg Val Pro Val Glu Gly Ser Arg Leu Arg Gly Ala Gly  
 20 25 30  
 Gly Pro Val Gly Ala Arg Pro Arg Gly Glu Gln Arg Val Ala Arg Ala  
 35 40 45  
 Arg Ala Thr Lys Gly Gly Arg Gly Gly Arg Gly Gly Gly Ala Gln  
 50 55 60  
 Ala Ser Ala Arg Arg Pro Val Gly Trp Pro Ser Trp Arg Gly Gly Gly  
 65 70 75 80  
 Arg Arg Ala Gly Gly Arg Gln Gly Asp Gln Leu Ala Gly Ala Pro Trp  
 85 90 95  
 Ala Gly Arg Pro Pro Ala Gly Lys Gly Ala Arg His Gly Gln Thr Leu  
 100 105 110

## 19421

Ala Glu Arg His Thr Arg Arg Ala Pro Gly Val Thr Pro Leu Ala Gly  
 115 120 125  
 Ala Pro Pro Gly Thr Asp Thr Gly Ser Arg Asn Thr Gln Thr Asp Thr  
 130 135 140  
 Gly Ser Ala His Arg  
 145

<210> 43051  
 <211> 192  
 <212> PRT  
 <213> A.fumigatus

<400> 43051  
 Lys Arg Pro Gly Ala His Ile Ala Gly Met Thr Glu Ala Arg Gly Pro  
 1 5 10 15  
 Phe Gly Pro Arg His Arg Trp Ser Leu Trp Ile Val Gly Arg Trp Pro  
 20 25 30  
 Val Leu Ile Pro Arg Phe Pro Gly Ala Ala Pro Arg Glu Pro Pro  
 35 40 45  
 Phe Val Gly Val Ser Ala Gly Ser Gly Pro Pro Thr Arg Gly Pro Tyr  
 50 55 60  
 Ala Ala Ala Arg Gln Arg Pro Arg Gly Arg Ser Asp Gly Ile Thr Cys  
 65 70 75 80  
 Val Arg Thr Gly Ser Glu Gly Leu Gln Trp Gly Gln Leu Asp Gly Arg  
 85 90 95  
 Arg Arg Ser Pro Gly Ala Pro Gly Ala Val Gly Ala Ala Gly Arg Arg  
 100 105 110  
 Met Ser Pro Leu Leu Asp Ser Pro Thr Tyr Thr Pro Pro Leu Arg Gly  
 115 120 125  
 Leu Val Gly Pro Ala Arg Ser Ala Pro Phe Ala Arg Trp Ser Ala Gly  
 130 135 140  
 Ala Gly Ala His Gln Val Leu Gly Ile Trp Leu Ile Leu Pro Val Val  
 145 150 155 160  
 Ile Cys Leu Ser Gln Arg Leu Ser His Ala Cys Leu Ser Ile Ser Asn  
 165 170 175  
 Leu Tyr Gly Glu Thr Ala Asn Gly Ser Leu Asn Gln Leu Ser Phe Ile  
 180 185 190

<210> 43052  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<400> 43052  
 Ser Asp Gln Ala Gly Arg Val Ser Gly Gln Val Ala Leu Leu Leu Arg  
 1 5 10 15  
 Val Ala Glu Arg Gln Pro Asp Pro Trp Leu Asp Leu Leu Ala Asn Thr  
 20 25 30  
 Ser His Gln Arg Ala Arg Gln Arg Ala Leu Gly Gly Gly Pro Arg  
 35 40 45  
 His Leu Ser Pro Glu Thr Arg Gly Gly Thr Gly Asp Gly Arg Ser Pro  
 50 55 60  
 Arg Asp Leu His Leu His Gly Leu Ser Pro Val Gly Arg Pro Arg Trp  
 65 70 75 80  
 Pro Arg Gly Pro Ala Arg Arg Arg Arg Leu Val Thr Lys Gly Ser Asp  
 85 90 95

## 19422

Gln Leu Ala Gly Ala His Gly Arg Thr Gly Gly Ala Arg Ser Ala Gly  
                   100                  105                  110  
 Ala Gly Gly Pro Pro Pro Gly Thr Thr Phe Gly Pro Gly Asn Val Cys  
                   115                  120                  125  
 Ala His Asp Asp Gly Pro Gly Glu Val Gly Gly Tyr Val  
                   130                  135                  140

&lt;210&gt; 43053

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (22)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43053

Gln Asn Phe Gly Gly Glu Lys Gly Gly Gln Ile Ala Thr Lys Lys Lys  
 1                  5                  10                  15  
 Trp Glu Gly Trp Gly Xaa Val Trp Gly Phe Pro His Gly Arg Glu Pro  
                   20                  25                  30  
 Pro Gly Arg Ala Ile Ser Gly Ile Pro Leu Arg Arg Asn Gly Pro Arg  
                   35                  40                  45  
 Gly Cys Ser Leu Gln Val Ser Pro Arg Arg Ala Gly Gly Phe Pro Gly  
                   50                  55                  60  
 Arg Thr Arg Gly Gly Ala Pro Gly Pro Ile Gly His Leu Trp Ala Leu  
 65                  70                  75                  80  
 Pro Val Ser Val Trp Val Phe Leu Asp Pro Val Ser Val Pro Gly Gly  
                   85                  90                  95  
 Ala Pro Ala Lys Gly Val Thr Pro Gly Ala Leu Arg Val Cys Arg Ser  
                   100                  105                  110  
 Ala Ser Val Cys Pro Trp Arg Ala Pro Leu Pro Ala Gly Gly Arg Pro  
                   115                  120                  125  
 Ala Gln Gly Ala Pro Ala Asn Trp Ser Pro Cys Arg Pro Pro Ala Arg  
                   130                  135                  140  
 Arg Pro Pro Pro Arg Gln Leu Gly Gln Pro Thr Gly Arg Arg Ala Leu  
 145                  150                  155                  160  
 Ala Cys Ala Pro Pro Pro Pro Arg Pro Pro Arg Pro Pro Phe Val Ala  
                   165                  170                  175  
 Leu Ala Arg Ala Thr Leu Cys Ser Pro Arg Gly Arg Ala Pro Thr Gly  
                   180                  185                  190  
 Pro Pro Ala Pro Leu Asn Arg Leu Pro Ser Thr Gly Thr Leu Ala Arg  
                   195                  200                  205  
 Ala Ala Gly Gly Pro Ser Pro Thr His Thr His Arg Pro Arg Pro Ala  
                   210                  215                  220  
 His His Arg Ala Arg Lys Arg Ser Arg Val Arg Thr Ser Phe Arg Gly  
 225                  230                  235                  240  
 Glu Ala His Leu Arg Arg Gln Thr Ala Arg Arg Pro Cys Gly His Val  
                   245                  250                  255  
 Pro Gln Pro Thr Gly His Cys Pro Ser Pro Gly Gly Gly Gly Ala  
                   260                  265                  270  
 Arg Val Pro Ala Ala Ile Ser Ala Gly Gln Leu Ala Arg Val His Gly  
                   275                  280                  285  
 Gly Gly Asp Pro Glu Gly Thr Gly Arg His Arg Cys Pro Pro Ala Ser  
                   290                  295                  300

## 19423

Pro Glu Lys Gly Val Trp Ala Pro Leu Gln Ala Pro Gly Ala Ala Gly  
 305 310 315 320  
 Pro Val Asp Gly Arg Cys Leu Pro Thr Asn Leu Ala Lys Asp Arg Ala  
 325 330 335  
 Asp Ala Gln Arg Leu Val Ala Thr Arg Leu Leu Asp Arg Leu His Asp  
 340 345 350  
 Pro Leu Gly His Phe Ser Arg Leu Gln Arg Ile His Pro Arg Ala Arg  
 355 360 365

&lt;210&gt; 43054

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43054

Met Ala Pro Val Gly His Ala Asp Leu Pro Pro Cys Arg Cys Arg Gly  
 1 5 10 15  
 Gly Met Arg Val His Met His Ile Tyr Ile Trp Met Asp Gly Trp Val  
 20 25 30  
 Ser Ala Tyr Pro His Gly Trp Met Pro Pro Ala Gly His Ala Gly Ile  
 35 40 45  
 Arg Arg Gly Arg Arg Pro Cys Ala Cys Arg Cys Lys Cys Pro Arg Arg  
 50 55 60  
 Arg Arg Ala Ala Leu Arg Cys Arg Gln Gly Arg Ala Arg Ala Gly Gln  
 65 70 75 80  
 Leu Val Thr Ser Gly Ala Ser Arg Val Arg Leu Gly Val Ser Arg Pro  
 85 90 95  
 Gly Val Gly Pro Trp Arg Ala Pro Ala Asn Trp Ser Pro Pro Val Pro  
 100 105 110  
 Ala Ser Val Ser Leu Gly Gln Arg Leu Ser Met Ala Arg Ala Leu Ala  
 115 120 125  
 Cys Arg Arg Pro Ala Cys Pro Arg Gly Ser Arg Gln Leu Val Thr Leu  
 130 135 140  
 Pro Pro Ala Arg Ala Ala Pro Pro Ala Ala Pro Thr Arg Pro Ala Asn  
 145 150 155 160  
 Trp Pro Pro Arg Ala Arg Leu Arg Ala Ser Pro Ser Ser Pro Ser Ser  
 165 170 175  
 Pro Ser Leu Arg Arg Pro Arg Ala Arg Asp Ser Leu Leu Ala Ser Arg  
 180 185 190  
 Ala Arg Ala Tyr Arg Ala Pro Ser Pro Pro Gln Pro Thr Pro Leu Asn  
 195 200 205  
 Arg Asp Pro Arg Ala Arg Arg Arg Arg Pro Phe Ser Tyr Thr Tyr Pro  
 210 215 220  
 Pro Thr Ser Pro Gly Pro Ser Ser Cys Ala Gln Thr Phe Pro Gly Pro  
 225 230 235 240  
 Asn Val Val Pro Gly Gly Gly Pro Pro Ala Pro Ala Asp Arg Ala Pro  
 245 250 255  
 Pro Val Arg Pro Cys Ala Pro Ala Asn Trp Ser Leu Pro Phe Val Thr  
 260 265 270  
 Arg Arg Arg Arg Arg Pro Gly Val Pro Ala Gly His Leu Gly Arg Ala  
 275 280 285  
 Asn Trp Arg Glu Ser Met Glu Val Glu Ile Pro Arg Gly Pro Ala Val  
 290 295 300  
 Pro Arg Trp Pro Pro Arg Val Ser Gly Glu Arg Cys Pro Gly Pro Pro  
 305 310 315 320  
 Leu Lys Thr Pro Arg Gly Leu Pro Gly Pro Val Glu Gly Glu Gly Phe

## 19424

325 330 335  
 Cys His Pro Asn Leu Thr Lys Gly Ser Gly Arg Asn Pro Gln Pro Thr  
 340 345 350  
 Pro Tyr Gln Thr Arg Val Pro  
 355

&lt;210&gt; 43055

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43055

Gly Gly Thr Ala Gln Gly Gly Val Arg Cys Lys Cys Pro Arg Gly Gly  
 1 5 10 15  
 Arg Gly Val Phe Arg Ala Glu Gln Gly Gly Ala Arg Pro Ala Gln Leu  
 20 25 30  
 Val Thr Cys Gly Arg Phe Pro Cys Pro Ser Gly Cys Phe Ser Thr Arg  
 35 40 45  
 Cys Arg Ser Gln Gly Gly Pro Arg Pro Lys Gly Ser Pro Pro Val Pro  
 50 55 60  
 Cys Glu Cys Val Ala Arg Pro Ala Ser Val His Gly Ala Arg Pro Cys  
 65 70 75 80  
 Leu Pro Ala Ala Gly Leu Pro Lys Gly Leu Pro Pro Thr Gly His Pro  
 85 90 95  
 Ala Ala Arg Pro Arg Gly Ala Pro Arg Arg Ala Asn Ser Ala Ser Gln  
 100 105 110  
 Leu Ala Ala Ala Arg Ser Pro Ala Arg Leu Pro Leu Leu Ala Leu Leu  
 115 120 125  
 Ala Leu Pro Ser Ser Pro Ser Arg Ala Arg Leu Ser Ala Arg Leu Glu  
 130 135 140  
 Gly Ala Arg Leu Pro Gly Pro Gln Pro Pro Ser Thr Asp Ser Pro Gln  
 145 150 155 160  
 Pro Gly Pro Ser Arg Ala Pro Pro Ala Ala Leu Leu Leu His Ile Pro  
 165 170 175  
 Thr Asp Leu Ala Arg Pro Ile Ile Val Arg Ala Asn Val Pro Gly Ser  
 180 185 190  
 Glu Arg Arg Ser Gly Gly Arg Pro Thr Cys Ala Gly Arg Pro Arg Ala  
 195 200 205  
 Ala Arg Ala Ala Met Cys Pro Ser Gln Leu Val Thr Ala Leu Arg His  
 210 215 220  
 Gln Ala Ala Ala Ala Arg Gly Ser Pro Arg Pro Ser Arg Pro Ala Asn  
 225 230 235 240  
 Trp Arg Glu Ser Met Glu Val Glu Ile Pro Arg Gly Pro Ala Val Thr  
 245 250 255  
 Gly Ala Pro Pro Arg Leu Arg Arg Lys Val Ser Gly Pro Pro Ser Lys  
 260 265 270  
 Arg Pro Ala Leu Pro Gly Pro Leu Met Gly Gly Val Cys Gln Gln Ile  
 275 280 285

&lt;210&gt; 43056

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43056

Gln Gln Gly Tyr Leu Thr Ala Tyr Thr Thr Arg Leu Val Thr Ser Val



## 19425

```

1           5           10           15
Val Cys Arg Gly Phe Ile Pro Ala Arg Gly Asp Ile Ala Ile Arg Gln
                20           25           30
Pro Ala Pro Gly Gly Phe Ser Pro Gly Ala Val Ala Ser Leu Leu Arg
        35           40           45
Tyr Met Ala Arg Arg Pro Ile Arg Ile Gln Leu Arg Arg Ala Gly Leu
        50           55           60
His Arg Arg Val Pro Ala Arg Ile Leu Thr
65           70

```

&lt;210&gt; 43057

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43057

```

Ser Phe Ala Pro Ile Pro Lys Phe Asp Asp Arg Phe Ala Arg Gln Asn
1           5           10           15
Arg Cys Glu Pro Pro Pro Glu Phe Pro Leu Ala Ser Pro Tyr Ser Gly
        20           25           30
Ile Val His His Leu Ser Gly Pro His Ser Tyr Ala Arg Thr Gln Ile
        35           40           45
His Pro Lys Thr Ser Gly Ser Val Asp Gly Ala Pro Arg Glu Gly Ala
        50           55           60
Pro Thr Ser Val Arg Phe His Cys Ala Tyr Gly Phe Asp Thr Arg Thr
65           70           75           80
Leu Ala

```

&lt;210&gt; 43058

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43058

```

Lys Asn Lys Val Gly Cys Arg Leu Ala Pro Ala Gly Pro Thr Glu Gln
1           5           10           15
Val Thr Lys Pro His Thr Leu Glu Asp Arg Thr Arg Cys Arg Arg Cys
        20           25           30
Leu Ser Gly Pro Ser Pro Gly Arg Gly Gly Arg Gly Pro Asn Thr Gln
        35           40           45
Ala Val Leu Glu Gly Ser Asn Asp Ala Arg Thr Gly Met Pro Pro Gly
        50           55           60
Ile Pro Gly Gly Ala Met Cys Val Gln Arg Leu Asp Asp Ser Leu Asn
65           70           75           80
Ser Ala Ile His Ile Thr Tyr Arg Ile Ser Leu Arg Ser Ser Ser Met
        85           90           95
Pro Glu Pro Arg Asp Pro Leu Leu Lys Val Leu Thr Asp Tyr Asp Asn
        100          105          110
Gln Leu Arg Leu His Thr Phe Arg Thr Ala Phe Met Leu Gly Ser Ser
        115          120          125
Ala Gly Ala Gly Pro Gly Ala Gln Gly Leu Pro Gly Gly Arg Arg Asn
        130          135          140
Gly Gly Pro Ala Glu Ala Thr Arg Tyr Asp Arg His Gly Trp Glu Val
145          150          155          160
Gly Pro Arg Gly Pro Ser Leu Gly Asn Asp Pro Ser Ala Gly Ser Pro

```

## 19426

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |
| Thr | Glu | Thr | Leu | Leu | Arg | Leu | Leu | Leu | Pro | Leu | Asn | Asp | Arg | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |

&lt;210&gt; 43059

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43059

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ala | Arg | Trp | His | Arg | Trp | Ala | Met | Pro | Thr | Tyr | Leu | Arg | Ala | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val | Gly | Gly | Gly | Cys | Gly | Cys | Ile | Cys | Thr | Tyr | Ile | Tyr | Gly | Trp | Met |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Gly | Cys | Leu | Arg | Ile | Pro | Thr | Asp | Gly | Cys | Arg | Arg | Arg | Ala | Met |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Ala | Ser | Val | Glu | Ala | Asp | Gly | His | Val | Arg | Val | Ala | Ala | Ser | Val |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Val | Asp | Gly | Ala | Arg | Leu | Ser | Gly | Ala | Asp | Lys | Gly | Ala | Arg | Ala |
|     |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Pro | Ala | Asn | Trp | Ser | Pro | Leu | Ala | Pro | Pro | Val | Ser | Val | Trp | Val | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Asp | Pro | Val | Ser | Val | Pro | Gly | Ala | Arg | Arg | Pro | Thr | Gly | His | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Cys | Leu | Arg | Val | Cys | Arg | Ser | Ala | Ser | Val | Cys | Pro | Trp | Arg | Ala |
|     |     |     | 115 |     |     |     |     | 120 |     |     |     | 125 |     |     |     |
| Pro | Leu | Pro | Ala | Gly | Gly | Arg | Pro | Ala | Gln | Gly | Ala | Pro | Ala | Asn | Trp |
|     |     |     | 130 |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Pro | Cys | Arg | Pro | Pro | Ala | Arg | Arg | Pro | Pro | Pro | Arg | Gln | Leu | Gly |
|     |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gln | Pro | Thr | Gly | Arg | Arg | Ala | Leu | Ala | Cys | Ala | Pro | Pro | Pro | Pro | Arg |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Pro | Pro | Arg | Pro | Pro | Phe | Val | Ala | Leu | Ala | Arg | Ala | Thr | Leu | Cys | Ser |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Pro | Arg | Gly | Arg | Ala | Pro | Thr | Gly | Pro | Pro | Ala | Pro | Leu | Asn | Arg | Leu |
|     |     |     | 195 |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Ser | Thr | Gly | Thr | Leu | Ala | Arg | Ala | Ala | Gly | Gly | Pro | Ser | Pro | Thr |
|     |     |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| His | Thr | His | Arg | Pro | Arg | Pro | Ala | His | His | Arg | Ala | Arg | Lys | Arg | Ser |
|     |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Arg | Val | Arg | Thr | Ser | Phe | Arg | Gly | Glu | Ala | His | Leu | Arg | Arg | Gln | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Ala | Arg | Arg | Pro | Cys | Gly | His | Val | Pro | Gln | Pro | Thr | Gly | His | Cys | Pro |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ser | Ser | Pro | Gly | Gly | Gly | Gly | Ala | Pro | Gly | Ser | Pro | Arg | Ala | Ile | Ser |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ala | Gly | Pro | Thr | Gly | Glu | Ser | Pro | Trp | Arg | Trp | Arg | Ser | Pro | Gly | Asp |
|     |     | 290 |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Arg | Pro | Ser | Pro | Gly | Gly | Pro | Pro | Ala | Ser | Pro | Glu | Lys | Gly | Val | Arg |
|     |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Gly | Pro | Pro | Ser | Lys | Pro | Pro | Gly | Ala | Cys | Arg | Gly | Pro | Leu | Lys | Gly |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Lys | Val | Phe | Ala | Thr | Gln | Thr | Ser | Pro | Arg | Asp | Arg | Gly | Gly | Thr | Pro |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Asn | Gln | Pro | Arg | Ile | Lys | Gln | Gly | Ser | Leu | Glu | Pro | Pro | Ile | Arg | Asn |
|     |     |     | 355 |     |     |     | 360 |     |     |     |     |     | 365 |     |     |

## 19427

Pro Ala Gly Ser Phe Pro Ile Pro Leu Ala Lys Gly Ile Thr Pro Pro  
 370 375 380  
 Pro Gln Arg  
 385

<210> 43060

<211> 322

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (23)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43060

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Glu | Leu | Arg | Gly | Gly | Glu | Gly | Gly | Ala | Asn | Cys | Asn | Lys | Lys | Lys |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Met | Gly | Gly | Met | Gly | Gly | Xaa | Leu | Gly | Ile | Pro | Pro | Arg | Glu | Gly | Thr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Pro | Arg | Ala | Gly | His | Ile | Arg | Asn | Pro | Val | Glu | Ala | Glu | Arg | Pro | Lys |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Gly | Val | Phe | Ala | Ala | Ser | Val | Pro | Glu | Glu | Gly | Gly | Gly | Phe | Ser | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Asn | Lys | Gly | Gly | Arg | Ala | Arg | Pro | Asn | Trp | Ser | Pro | Val | Gly | Ala |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Arg | Val | Arg | Leu | Gly | Val | Ser | Arg | Pro | Gly | Val | Gly | Pro | Arg | Gly |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     | 95  |     |     |     |
| Gly | Pro | Gly | Gln | Arg | Gly | His | Pro | Arg | Cys | Pro | Ala | Ser | Val | Ser | Leu |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Gly | Gln | Arg | Leu | Ser | Met | Ala | Arg | Ala | Leu | Ala | Cys | Arg | Arg | Pro | Ala |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Cys | Pro | Arg | Gly | Ser | Arg | Gln | Leu | Val | Thr | Leu | Pro | Pro | Ala | Arg | Ala |
| 130 |     |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Ala | Pro | Pro | Ala | Ala | Pro | Thr | Arg | Pro | Ala | Asn | Trp | Pro | Pro | Arg | Ala |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Arg | Leu | Arg | Ala | Ser | Pro | Ser | Ser | Pro | Ser | Ser | Pro | Ser | Leu | Arg | Arg |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Pro | Arg | Ala | Arg | Asp | Ser | Leu | Leu | Ala | Ser | Arg | Ala | Arg | Ala | Tyr | Arg |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| Ala | Pro | Ser | Pro | Pro | Gln | Pro | Thr | Pro | Leu | Asn | Arg | Asp | Pro | Arg | Ala |
|     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| Arg | Arg | Arg | Arg | Pro | Phe | Ser | Tyr | Thr | Tyr | Pro | Pro | Thr | Ser | Pro | Gly |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |
| Pro | Ser | Ser | Cys | Ala | Gln | Thr | Phe | Pro | Gly | Pro | Asn | Val | Val | Pro | Gly |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     | 240 |     |
| Gly | Gly | Pro | Pro | Ala | Pro | Ala | Asp | Arg | Ala | Pro | Pro | Val | Arg | Pro | Cys |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |
| Ala | Pro | Ala | Asn | Trp | Ser | Leu | Pro | Phe | Val | Thr | Arg | Arg | Arg | Arg | Arg |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |     |
| Ala | Gly | Pro | Arg | Gly | His | Leu | Gly | Arg | Pro | Thr | Gly | Glu | Ser | Pro | Trp |
|     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |
| Arg | Trp | Arg | Ser | Arg | Gly | Asp | Arg | Pro | Ser | Pro | Val | Pro | Pro | Arg | Val |
|     | 290 |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |     |
| Ser | Gly | Glu | Arg | Cys | Leu | Gly | Pro | Pro | Pro | Ser | Ala | Arg | Arg | Cys | Arg |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |

Ala Arg

<210> 43061  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

<400> 43061  
 Ser Gln Ser Leu Ser Arg Ser Tyr Gly Ser Ile Leu Pro Thr Ser Leu  
 1 5 10 15  
 Ile Tyr Ile Val Leu Ser Thr Arg Gly Cys Ser Pro Trp Arg Pro Ala  
 20 25 30  
 Ala Val Met Ser Thr Thr Trp Arg Glu Asn Tyr Ser Phe Pro Arg Ile  
 35 40 45  
 Phe Lys Gly Arg Arg Gly Arg Thr Gly Pro Arg Lys Gly Ala Gly Leu  
 50 55 60  
 Cys Gln Pro Trp Asn Pro Ser Ser Gly Gln Thr Asp Phe Arg Val Glu  
 65 70 75 80  
 Gly Cys Gln Glu Glu Lys Arg Thr Leu Pro Arg Thr Pro Ala Asp Val  
 85 90 95  
 Ser Ala Phe Ser Tyr Val Ala Val Glu Asn Pro His Pro Gly Ala Gly  
 100 105 110  
 Met Leu Thr Gly Phe Pro Phe Gly Thr Arg Arg Thr Arg Ala Pro Phe  
 115 120 125  
 Lys Arg Asn Phe Pro Met Pro  
 130 135

<210> 43062  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 43062  
 Phe Ile Arg Pro Val Ser Cys Tyr Thr Leu Leu Ser Gly Phe Arg Leu  
 1 5 10 15  
 Pro Trp Pro Pro Ser Gly Cys Leu Asp Glu Leu Thr Pro Phe Val Val  
 20 25 30  
 Ser Asp Glu Arg Ala Phe Arg His Leu Asn Leu Ala Phe Gly Ser Ser  
 35 40 45  
 Arg Ile Ala Ser Ser Ala Tyr Gln Lys Trp Pro Thr Ser Asn Ala Ser  
 50 55 60  
 Phe  
 65

<210> 43063  
 <211> 267  
 <212> PRT  
 <213> A.fumigatus

<400> 43063  
 Thr Ala Arg Gly Ser Pro Val Pro Thr Arg Ala Arg Ala Arg Arg Pro  
 1 5 10 15  
 Thr Gly His Leu Trp Arg Leu Pro Cys Pro Ser Gly Cys Leu Ser Thr  
 20 25 30  
 Arg Cys Arg Ser Leu Ala Arg Ala Gly Gln Leu Val Thr Pro Gly Ala

## 19429

```

      35              40              45
Cys Glu Cys Val Ala Arg Pro Ala Ser Val His Gly Ala Arg Pro Cys
  50              55              60
Leu Pro Ala Ala Gly Leu Pro Lys Gly Leu Pro Pro Thr Gly His Pro
  65              70              75              80
Ala Ala Arg Pro Arg Gly Ala Pro Arg Arg Ala Asn Ser Ala Ser Gln
      85              90              95
Leu Ala Ala Ala Arg Ser Pro Ala Arg Leu Pro Leu Leu Ala Leu Leu
      100              105              110
Ala Leu Pro Ser Ser Pro Ser Arg Ala Arg Leu Ser Ala Arg Leu Glu
      115              120              125
Gly Ala Arg Leu Pro Gly Pro Gln Pro Pro Ser Thr Asp Ser Pro Gln
      130              135              140
Pro Gly Pro Ser Arg Ala Pro Pro Ala Ala Leu Leu Leu His Ile Pro
      145              150              155              160
Thr Asp Leu Ala Arg Pro Ile Ile Val Arg Ala Asn Val Pro Gly Ser
      165              170              175
Glu Arg Arg Ser Gly Gly Arg Pro Thr Cys Ala Gly Arg Pro Arg Ala
      180              185              190
Ala Arg Ala Ala Met Cys Pro Ser Gln Leu Val Thr Ala Leu Arg His
      195              200              205
Gln Ala Ala Ala Ala Pro Arg Gly Pro Arg Gly Pro Ser Arg Pro Gly
      210              215              220
Gln Leu Ala Arg Val His Gly Gly Gly Asp Pro Gln Gly Thr Gly Arg
      225              230              235              240
Pro Pro Val Ala Pro Pro Arg Leu Arg Arg Lys Val Ser Gly Ala Pro
      245              250              255
Pro Gln Asn Pro Pro Gly Pro Ala Gly Ala Arg
      260              265

```

<210> 43064  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43064
Arg Gly Arg Phe Leu Pro Pro Lys Pro His Gln Gly Ile Gly Ala Glu
  1              5              10              15
Pro Pro Thr Asn Pro Val Ser Asn Lys Gly Pro Leu Asn Arg Leu Ser
      20              25              30
Glu Thr Pro Leu Gly Pro Phe Gln Ser Leu Leu Gln Lys Glu Ser Leu
      35              40              45
Pro Arg Pro Lys Gly Glu Ile Val Asn Ser Gly Gln Ala Ser Pro Ala
      50              55              60

```

<210> 43065  
 <211> 178  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43065
Asn Tyr Glu Arg Leu Lys Asn Phe Phe Phe Met Asn Asn Ile Phe Leu
  1              5              10              15
Leu Asn Asp Tyr Ile Thr Asn Gly Phe Arg Ile Glu Phe Val Asp Met
      20              25              30
Ile Tyr Leu Ile Ser Ile Leu Phe Gly Val Leu Thr Ile Val Ser Arg

```

# 19430

```

      35              40              45
Asn Pro Ile Val Ser Val Leu Phe Leu Ile Gly Leu Phe Val Asn Ile
  50              55              60
Ala Gly Leu Leu Ile Leu Val Gly Tyr Asn Tyr Ile Gly Leu Ser Tyr
  65              70              75              80
Ile Leu Val Tyr Val Gly Ala Val Ser Ile Leu Phe Leu Phe Ile Leu
      85              90              95
Met Leu Ile Asn Ile Arg Ile Ser Glu Leu Leu Ser Glu Thr Asn Asn
      100              105              110
Asp Ile Pro Leu Ala Val Leu Thr Val Leu Leu Phe Tyr Tyr Ile Val
      115              120              125
Gly Gln Val Leu Pro Ser Asn Leu Thr Asp Asn Thr Ile Val Ser Tyr
      130              135              140
Leu Ser Asn Ser Phe Ser Glu Val Tyr Asn Val Gln Leu Asp Asn Glu
  145              150              155              160
Phe Phe Asn Ile Val Asp Leu Lys Gln Glu Ile Ala Tyr Ala Ser Ser
      165              170              175
Lys Gly

```

<210> 43066  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43066
Leu Ile Val Cys Arg Met Tyr Val Val Cys Asn Ser Ile Leu Val Lys
  1              5              10              15
Val Thr Leu Leu Lys Gly Leu Asn Thr Asn Ile Tyr Ser Lys Met Leu
      20              25              30
Gln Ala Ala Lys Ile Ile Gly Thr Gly Leu Ala Thr Thr Gly Leu Ile
      35              40              45
Gly Ala Gly Val Gly Ile Gly Val Val Phe Gly Ala Leu Ile Leu Gly
  50              55              60
Val Ala Arg Asn Pro Ser Leu Arg Gly Gln Leu Phe Ser Tyr Ala Ile
  65              70              75              80
Leu Gly Phe Ala Phe Ala Glu Ala Thr Gly Leu Phe Ala Leu Met Met
      85              90              95
Ala Phe Leu Leu Leu Tyr Val Ala
      100

```

<210> 43067  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43067
Tyr Ile Phe Arg Cys Arg Trp Phe Ile Asn Ile Phe Cys Ile Ile Asn
  1              5              10              15
Asn Tyr Asn Asn Ala Tyr Ser Asn Ile Ile Lys Leu Lys Phe Asn Thr
      20              25              30
Ile Thr Lys Cys Ile Val Ile Cys Ser Asn Asn Val Ile Ile Arg Asn
      35              40              45
Ile Ile Ile Ser Ser Ile Leu Ser Ile Arg Cys Ile Val Ile Leu Tyr
  50              55              60
Ile Leu Arg Lys Tyr Phe Thr Thr Ile Ile Phe Ile Asn Arg Ile Ile

```

```
<210> 43068
<211> 60
<212> PRT
<213> A.fumigatus
```

```

<400> 43068
Phe Cys Ile Asn Ile Thr Phe Tyr Leu Asn Ile Leu Asn Glu Phe His
1          5          10          15
Cys Cys Phe Arg Cys Asn Ile Leu Arg Ile Pro Lys Thr Trp Ile Lys
          20          25          30
Ile Leu Phe Ile Ile Cys Thr Phe Arg Leu Ser Phe Ser Ile Ile Thr
          35          40          45
Phe Ile Ser Phe Asn Arg Ile His Phe Ile Leu Ile
          50          55          60

```

```
<210> 43069
<211> 103
<212> PRT
<213> A.fumigatus
```

```

<400> 43069
Pro Pro Leu Gly Ile Gln Gly Val Asn Pro Phe Glu Leu Pro Leu Leu
1          5          10          15
Asn Thr Ile Ile Leu Leu Ser Ser Gly Val Thr Ile Thr Tyr Ala His
          20          25          30
His Ser Leu Ile Gln Gly Asn Arg Lys Gly Ala Leu Tyr Gly Thr Val
          35          40          45
Ala Thr Ile Ile Leu Ala Ile Ile Phe Thr Phe Phe Glu Gly Val Glu
          50          55          60
Tyr Thr Val Ser Ser Phe Thr Ile Ser Asp Ser Val Tyr Gly Ser Cys
65          70          75          80
Phe Tyr Phe Gly Thr Gly Phe His Gly Leu His Val Ile Ile Gly Thr
          85          90          95
Ala Phe Leu Ala Val Gly Leu
          100

```

```
<210> 43070
<211> 333
<212> PRT
<213> A.fumigatus
```

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43070 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Lys         | Ile | Glu | Lys | Gln | Leu | Arg | Lys | Glu | Arg | Leu | Arg | His | Arg | Leu | Arg |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys         | Leu | Ser | Thr | Asn | Arg | Ile | Phe | Val | Ser | Asp | Gly | Glu | Phe | Lys | His |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr         | Asn | Asp | Lys | Val | Asn | Ile | Thr | Leu | Tyr | Val | Tyr | Asn | Arg | Gln | Lys |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu         | Asn | Tyr | Leu | Leu | Lys | Leu | Lys | Lys | Arg | Tyr | Ile | Arg | Leu | Phe | Lys |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg         | Val | Lys | Phe | Val | Arg | Lys | Leu | Gln | Leu | Ile | Arg | Asn | Ile | Gly | Leu |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |

## 19432

Asn Ile Leu Lys Lys Gln Gln Glu Lys Ser Lys Ile Leu Thr Asn Ile  
 85 90 95  
 Leu Pro Asn Tyr Ser Ser Lys Ile Ser Arg Ile Gln Asn Phe Tyr Tyr  
 100 105 110  
 Lys Lys Phe Ile Ile Lys Ser Phe Lys Arg Leu Lys Tyr Tyr Met Phe  
 115 120 125  
 Tyr Lys Gln Leu Leu Tyr Ile Asn Lys Ala Lys Phe Glu Asn Ser Tyr  
 130 135 140  
 Leu Gln Gly Leu Ile Asn Leu Ile Lys Lys Ile Tyr Lys Lys Asn Val  
 145 150 155 160  
 Glu Phe Asn Ile Ile Asn Leu Lys Tyr Phe Tyr Phe Asn Ser Asp Ile  
 165 170 175  
 Phe Thr Gln Pro Leu Val Leu Lys Leu Arg Lys Lys Arg Lys Pro Leu  
 180 185 190  
 Lys Tyr Leu Lys Ala Leu Val Arg Lys Ala Lys Ile Lys Lys Ile Lys  
 195 200 205  
 Leu Asn Glu Arg Ser Lys Tyr Phe Phe Glu Leu Asn Asn Leu Phe Thr  
 210 215 220  
 Val Asn Asn Leu Asp Thr Asn Asn Leu Leu Asn Asn Leu Ile Glu  
 225 230 235 240  
 Glu Asn Lys Thr Ser Ser Lys Tyr Leu Lys Lys Ile Val Leu Asn Asn  
 245 250 255  
 Ile Lys Tyr Lys Arg Val Ser Gly Val Arg Ile Glu Ala Ala Gly Arg  
 260 265 270  
 Leu Thr Arg Arg Tyr Thr Ala Ser Arg Ser Gln His Lys Val Arg Tyr  
 275 280 285  
 Lys Gly Asn Leu Val Asn Ala Tyr Ser Ser Ile Lys Gly Tyr Pro Ser  
 290 295 300  
 Ser Val Ile Arg Gly Asn Tyr Lys Pro Asn Leu Gln Tyr Thr Lys Leu  
 305 310 315 320  
 Asn Ser Lys Ser Arg Ile Gly Ser Phe Gly Val Lys Gly  
 325 330

&lt;210&gt; 43071

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43071

Tyr Leu Ser Ser Asn Ala Lys Asp Ile Gly Thr Leu Tyr Leu Ile Phe  
 1 5 10 15  
 Ala Leu Phe Ser Gly Leu Leu Gly Thr Ala Phe Ser Val Leu Ile Arg  
 20 25 30  
 Leu Glu Leu Ser Gly Pro Gly Val Gln Tyr Ile Ser Asp Asn Gln Leu  
 35 40 45  
 Tyr Asn Ser Ile Ile Thr Ala His Ala Ile Met Met Ile Phe Phe Met  
 50 55 60  
 Val Met Pro Ala Leu Ile Gly Gly Phe Gly Asn Phe Leu Leu Pro Leu  
 65 70 75 80  
 Leu Val Gly Gly Pro Asp Met Ala Lys Glu Lys Lys Glu Met Asp Leu  
 85 90 95  
 His Arg Phe Asn Ile Arg Tyr Tyr Ser Asn Asp Leu Lys Asn Lys Phe  
 100 105 110  
 Lys Gly Tyr Leu Ala Gly Leu Phe Glu Gly Asn Gly His Ile Ser Ile  
 115 120 125  
 Lys Lys Ser Ser Lys Lys Lys His Asn Pro Arg Phe Tyr Ile Thr Phe



## 19433

|   |     |     |     |     |
|---|-----|-----|-----|-----|
| 130   |     | 135 |     | 140 |
| Asn Met Lys Asn Gln Pro Leu Ala Lys Lys Leu Val Asp Leu Ile Lys |     |     |     |     |
| 145   |     | 150 |     | 155 |
| Trp Gly Asp Leu Arg Tyr Glu Leu Lys Asn Asp Ala Cys Val Leu Val |     |     |     |     |
|   | 165 |     | 170 | 175 |
| Val Ser Ser Val Ile Gly Leu Lys Lys Val Val Glu Leu Leu Asn Gly |     |     |     |     |
|   | 180 |     | 185 | 190 |
| Glu Leu Arg Thr Pro Lys Ile His Leu Leu Tyr Asn Leu Ile Asp     |     |     |     |     |
| 195   |     | 200 |     | 205 |

<210> 43072  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<400> 43072

|   |     |     |
|---|-----|-----|
| Leu Ser Gly Phe Ile Asp Ser Asn Gly Ser Phe Ser Ile Gln His Thr |     |     |
| 1   | 5   | 10  |
| Lys Leu Lys Asn Gly Ile Lys Lys Arg Lys Ile Ser Cys Arg Leu Arg |     |     |
|   | 20  | 25  |
| Ile Glu Glu Arg Ile Leu Asp Pro Ile Thr Lys Asn Ser Tyr Leu Lys |     |     |
|   | 35  | 40  |
| Val Phe Thr Asp Ile Ser Asn Phe Leu Asn Cys Ser Leu Leu Thr Arg |     |     |
|   | 50  | 55  |
| Lys Gln Lys Ser Thr Gly Asn Glu Tyr Tyr Ile Leu Thr Val Ser Ser |     |     |
| 65  | 70  | 75  |
| Ile Met Ser Leu Asn Leu Ile Val Asn Tyr Leu Glu Lys Tyr Pro Leu |     |     |
|   | 85  | 90  |
| Phe Ser Ser Lys Tyr Leu Asp Tyr Lys Asp                         |     |     |
|   | 100 | 105 |

<210> 43073  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 43073

|   |    |    |
|---|----|----|
| Phe Leu Leu Val Met Thr Phe Asn Ile Phe Ile Leu Ile Asn Ile Leu |    |    |
| 1   | 5  | 10 |
| Phe Ser Lys Lys Lys Asn Tyr Phe Tyr Ile Tyr Ile Leu Leu Phe Leu |    |    |
|   | 20 | 25 |
| Ile Phe Phe Phe Tyr Ile Ile Tyr Glu Phe Ile Phe Ala Lys Lys Ile |    |    |
|   | 35 | 40 |
| Tyr Ile Phe Phe Ile Ile Leu Leu Lys Ile Ser Asn Leu Phe         |    |    |
|   | 50 | 55 |
|   |    | 60 |

<210> 43074  
 <211> 149  
 <212> PRT  
 <213> A.fumigatus

<400> 43074

|   |    |    |
|---|----|----|
| Ile Ile Ile Tyr Leu Phe Asn Asn Ser Ser Ser Gln Leu Ile Lys Gln |    |    |
| 1   | 5  | 10 |
| Lys Gln Ile Cys Leu Tyr Ile Met Thr Thr Thr Thr Phe Phe Leu Phe |    |    |
|   | 20 | 25 |
|   |    | 30 |

## 19434

Leu Ile Pro Val Leu Ala Ile Ile Leu Leu Ala Val Asn Leu Ile Leu  
 35 40 45  
 Ser Pro His Asn Pro Tyr Gln Glu Lys Asp Ser Ala Phe Glu Cys Gly  
 50 55 60  
 Phe His Ser Phe Leu Gly Gln Asn Arg Thr Gln Phe Ser Ile Ser Phe  
 65 70 75 80  
 Phe Ile Phe Ala Leu Leu Phe Leu Leu Phe Asp Leu Glu Ile Leu Leu  
 85 90 95  
 Val Tyr Pro Tyr Val Val Ser Ala Tyr Thr Asn Gly Ile Tyr Gly Leu  
 100 105 110  
 Val Ile Met Leu Val Phe Phe Leu Val Leu Thr Leu Gly Phe Ala Phe  
 115 120 125  
 Glu Leu Gly Lys Asn Ala Leu Lys Ile Glu Ser Arg Gln Val Phe Asn  
 130 135 140  
 Phe Asn Tyr Lys Ser  
 145

&lt;210&gt; 43075

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43075

Ser Tyr Gln Tyr Pro Asp Phe Thr Asn Glu Asp Asn Glu Phe Ile Glu  
 1 5 10 15  
 Phe Asp Ser Tyr Ile Val Pro Glu Ser Asp Leu Glu Asp Gly Gln Phe  
 20 25 30  
 Arg Met Leu Glu Val Asp Asn Arg Val Ile Ile Pro Glu Leu Thr His  
 35 40 45  
 Thr Arg Phe Val Ile Ser Ala Ala Asp Val Ile His Ser Tyr Ala Cys  
 50 55 60  
 Pro Ser Leu Gly Ile Lys Ala Asp Ala Tyr Pro Gly Arg Leu Asn Gln  
 65 70 75 80  
 Ala Ser Val Tyr Val Asn Arg Pro Gly Thr Phe Phe Gly Gln Cys Ser  
 85 90 95  
 Glu Ile Cys Gly Ile Leu His Ser Ser Met Pro Ile Ala Ile Gln Ser  
 100 105 110  
 Val Ser Ile Lys Asp Phe Leu Leu  
 115 120

&lt;210&gt; 43076

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43076

Ile Met Tyr Leu Thr Leu Ile Ile Leu Pro Leu Leu Gly Ser Ile Ile  
 1 5 10 15  
 Ser Gly Phe Phe Gly Arg Lys Val Gly Val Arg Gly Ala His Ile Ile  
 20 25 30  
 Thr Cys Thr Ser Val Ile Thr Thr Phe Leu Ala Ile Leu Ala Phe  
 35 40 45  
 Phe Glu Val Gly Phe Asn Asn Ile Pro Val Thr Ile Asn Val Ala Arg  
 50 55 60

&lt;210&gt; 43077

<211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 43077

Asn Phe Arg Phe Asp Ser Leu Thr Val Ser Met Leu Leu Pro Val Leu  
 1 5 10 15  
 Ile Val Ser Ser Leu Val His Val Tyr Ser Ile Ser Tyr Met Ser His  
 20 25 30  
 Asp Pro His Asn Gln Arg Phe Phe Ser Tyr Leu Ser Leu Phe Thr Phe  
 35 40 45  
 Met Met Ile Ile Leu Val Thr Gly Asn Asn Tyr Leu Ile Met Phe Val  
 50 55 60  
 Gly  
 65

<210> 43078  
 <211> 381  
 <212> PRT  
 <213> A.fumigatus

<400> 43078

Leu Gly Ala Ile Thr Thr Val Phe Ser Ser Leu Ile Gly Leu Phe Gln  
 1 5 10 15  
 Gln Asp Ile Lys Lys Val Ile Ala Tyr Ser Thr Met Ser Gln Leu Gly  
 20 25 30  
 Met Met Val Ile Ala Val Gly Leu Ser Ser Tyr Asn Leu Ala Leu Phe  
 35 40 45  
 His Leu Val Asn His Ala Phe Tyr Lys Ala Leu Leu Phe Leu Gly Ala  
 50 55 60  
 Gly Ser Val Ile His Ala Val Ala Asp Asn Gln Asp Phe Arg Lys Tyr  
 65 70 75 80  
 Gly Gly Leu Arg Glu Phe Leu Pro Leu Thr Tyr Ser Val Met Leu Ile  
 85 90 95  
 Ala Ser Leu Ser Leu Val Ala Val Pro Phe Met Thr Gly Phe Tyr Ser  
 100 105 110  
 Lys Asp Phe Ile Leu Glu Ser Ala Tyr Gly Gln Tyr Tyr Leu Ser Ser  
 115 120 125  
 Thr Ile Val Tyr Phe Val Ala Thr Ile Gly Ala Met Phe Thr Thr Leu  
 130 135 140  
 Tyr Ser Ala Lys Val Leu Tyr Leu Thr Phe Leu Ala Asn Pro Asn Gly  
 145 150 155 160  
 Pro Leu Val Asn Tyr Lys His Ala His Glu Gly Asp Leu Phe Met Thr  
 165 170 175  
 Ile Pro Leu Ile Ile Leu Ala Ile Phe Ser Ile Phe Phe Gly Tyr Leu  
 180 185 190  
 Thr Lys Asp Ile Phe Ile Gly Leu Gly Thr Gly Phe Phe Thr Asp Asn  
 195 200 205  
 Ser Leu Phe Ile His Pro Ser His Glu Ile Met Leu Asp Thr Glu Phe  
 210 215 220  
 Ala Val Pro Thr Phe Phe Lys Leu Leu Pro Phe Val Phe Thr Val Ser  
 225 230 235 240  
 Leu Ser Ile Leu Ser Val Leu Leu Ser Glu Phe Leu Pro Lys Leu Leu  
 245 250 255  
 Ile Asn Phe Lys Phe Ser Arg Leu Gly Tyr Asn Ile Phe Ser Phe Phe  
 260 265 270

## 19436

Asn Gln Arg Phe Tyr Ile Glu Leu Phe Tyr Asn Lys Tyr Ile Val Glu  
           275                                  280                                  285  
 Gly Val Leu Lys Leu Gly Gly Gln Thr Ser Lys Ser Leu Asp Lys Gly  
           290                                  295                                  300  
 Ser Val Glu Leu Ile Gly Pro Tyr Gly Leu Glu Lys Gly Leu Leu Ala  
 305                                  310                                  315                                  320  
 Leu Ser Asn Ser Ile Gly Asn Leu Ser Thr Gly Val Val Thr Thr Tyr  
                                   325                                  330                                  335  
 Ala Leu Tyr Ile Leu Ile Gly Leu Ile Phe Tyr Ile Ser Leu Ile Tyr  
                                   340                                  345                                  350  
 Phe Ser Tyr Asn Asp Asn Asn Leu Leu Ile Leu Val Ile Phe Thr Leu  
                                   355                                  360                                  365  
 Phe Ala Leu Leu Asn Ser Asn Asn Asn Lys Leu Ser Ser  
           370                                  375                                  380

&lt;210&gt; 43079

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43079

Gly Gly Phe Ser Val Asn Asn Ala Thr Leu Asn Arg Phe Phe Ala Leu  
 1                                  5                                  10                                  15  
 His Phe Leu Leu Pro Phe Val Leu Ala Ala Leu Val Ile Met His Leu  
                                   20                                  25                                  30  
 Ile Ala Met His Asp Thr Val Gly Ser Gly Asn Pro Leu Gly Ile Ser  
                                   35                                  40                                  45  
 Gly Asn Tyr Asp Arg Leu Pro Phe Ala Pro Tyr Phe Val Phe Lys Asp  
                                   50                                  55                                  60  
 Leu Val Thr Val Phe Ile Phe Phe Ile Val Leu Ser Val Phe Val Phe  
 65                                  70                                  75                                  80  
 Phe Met Pro Asn Ala Leu Gly Asp Ser Glu Asn Tyr Val Met Ala Asn  
                                   85                                  90                                  95  
 Pro Met Gln Thr Pro Pro Ala Ile Val Pro Glu  
                                   100                                  105

&lt;210&gt; 43080

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43080

Tyr Leu Leu Pro Phe Tyr Ala Ile Leu Arg Ser Ile Pro Asn Lys Leu  
 1                                  5                                  10                                  15  
 Leu Gly Val Ile Ala Met Phe Ala Ala Ile Leu Ala Leu Met Val Met  
                                   20                                  25                                  30  
 Pro Ile Thr Asp Leu Ser Lys Leu Arg Gly Val Gln Phe Arg Pro Leu  
                                   35                                  40                                  45  
 Ser Lys Ile Ala Phe Tyr Ile Phe Val Ala Asn Phe Leu Val Leu Met  
                                   50                                  55                                  60  
 Gln Leu Gly Ala Lys His Val Glu Thr Pro Phe Ile Glu Phe Gly Gln  
 65                                  70                                  75                                  80  
 Ile Ser Thr Val Leu Tyr Phe Ala His Phe Phe Val Ile Val Pro Val  
                                   85                                  90                                  95  
 Val Ser Ile Ile Glu Asn Ser Leu Val Glu Leu Ala Thr Lys Lys  
                                   100                                  105                                  110

<210> 43081  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 43081  
 Ala Glu Tyr Ala Ser Ile Val Leu Ile Cys Val Leu Asn Ser Ile Leu  
 1 5 10 15  
 Phe Leu Gly Gly Tyr Leu Ser Ile Ile Pro Leu Asp Phe Ile Ile Tyr  
 20 25 30  
 Ile Leu Asn Leu Phe Phe Asn Val Asn Asp Thr Ile Leu Tyr Asp Ile  
 35 40 45  
 Phe Ile His Ile Ser Ser Ser Pro Leu Asn Leu Ala Phe Lys Thr Ala  
 50 55 60  
 Phe Leu Ile Phe Val Phe Ile  
 65 70

<210> 43082  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<400> 43082  
 Ile Lys Tyr Lys Ile Ile Asn Met Ser Leu Leu Leu Leu Ile Pro  
 1 5 10 15  
 Leu Ile Gly Ile Gly Leu Val Thr Ile Glu Ala Asn Tyr Gly Leu Ser  
 20 25 30  
 Leu Ile Asn Asn Ile Arg Ile Lys Ser Ile Ala Leu Ile Thr Ser Ile  
 35 40 45  
 Val Asn Leu Val Val Ser Leu Ile Met Phe Ile Leu Phe Asp Phe Ser  
 50 55 60  
 Ser Lys Gln Phe Gln Phe Ile Glu Glu His Tyr Gln Ile Ser Tyr Phe  
 65 70 75 80  
 Asp Ile Tyr Leu Gly Val Asp Gly Leu Ser Ile Tyr Phe Val Leu Leu  
 85 90 95  
 Thr Thr Ile Ile Met Pro Ile Ala Ile Leu Ser Asn  
 100 105

<210> 43083  
 <211> 126  
 <212> PRT  
 <213> A.fumigatus

<400> 43083  
 Asn Ser Ile Gln Ser Gln Asn Val Leu Ser Phe Val Val Ile Met Leu  
 1 5 10 15  
 Leu Leu Glu Thr Leu Leu Leu Ala Val Phe Leu Val Leu Asp Val Leu  
 20 25 30  
 Leu Phe Tyr Ile Phe Phe Glu Ser Ile Leu Pro Pro Leu Phe Leu Leu  
 35 40 45  
 Ile Gly Leu Phe Gly Ser Ser Asn Lys Val Arg Ala Ser Phe Tyr Leu  
 50 55 60  
 Phe Leu Tyr Thr Leu Leu Gly Ser Leu Phe Met Leu Leu Ser Ile Ile  
 65 70 75 80  
 Ala Met Ser Ser Ile Met Gly Thr Thr Asp Phe Asp Ala Leu Ser Lys

## 19438

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| Ala | Asn | Phe | Ser | Tyr | Val | Thr | Gln | Leu | Phe | Leu | Phe | Tyr | Gly | Ile | Phe |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Ile | Ala | Phe | Ala | Val | Lys | Thr | Pro | Val | Ile | Phe | Leu | Asn | Thr |     |     |  |  |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |

&lt;210&gt; 43084

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43084

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Leu | Leu | Lys | Ala | His | Val | Glu | Ser | Pro | Leu | Ser | Gly | Ser | Ile | Ile | Leu |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Ala | Gly | Ile | Val | Leu | Lys | Leu | Ser | Leu | Tyr | Gly | Ile | Phe | Arg | Leu | Met |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Leu | Pro | Leu | Leu | Pro | Lys | Ala | Ser | Leu | Asn | Tyr | Thr | Tyr | Ile | Ile | Tyr |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Val | Ile | Gly | Val | Ile | Thr | Ile | Ile | Tyr | Ala | Ser | Phe | Ser | Thr | Leu | Arg |  |  |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Thr | Ile | Asp | Ile | Lys | Glu | Leu | Ile | Ala | Tyr | Ser | Ser | Val | Ser | His | Ala |  |  |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |  |  |
| Ala | Val | Tyr | Leu | Ile | Gly | Ala | Phe | Ser | Asn | Thr | Ile | Gln | Gly | Ile | Glu |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Gly | Ser | Ile | Leu | Leu | Gly | Leu | Ala | His | Gly | Phe | Val | Ser | Ser | Gly | Leu |  |  |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     | 110 |     |     |     |  |  |
| Phe | Ile | Cys | Ala | Gly | Gly | Val | Leu | Tyr | Asp | Arg | Ser | Ser | Thr | Arg | Leu |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     | 125 |     |     |     |     |  |  |
| Ile | Thr | Tyr | Tyr | Arg | Gly | Met | Ala | Gln | Val | Met | Pro | Ile | Phe | Ser | Val |  |  |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |  |  |
| Leu | Phe | Phe | Ile | Leu | Gly | Leu | Gly | Asn | Ser | Gly | Thr | Pro | Leu | Thr | Leu |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Asn | Phe | Leu | Gly | Glu | Phe | Met | Ser | Leu | Tyr | Gly | Val | Phe | Glu | Arg | Met |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Pro | Ile | Leu | Gly | Val | Leu | Ala | Ser | Thr | Ser | Ile | Val | Phe | Ser | Ala | Ala |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Tyr | Thr | Ile | Phe | Met | Tyr | Asn | Arg | Ile | Val | Phe | Gly | Gly | Ser | Tyr | Ser |  |  |
|     |     | 195 |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |
| Ile | Tyr | Phe | Val | Glu | Asn | Ile | Gly | Asp | Val | Thr | Arg | Arg | Glu | Phe | Ile |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Met | Leu | Leu | Val | Phe | Val | Ile | Leu | Thr | Val | Leu | Phe | Gly | Ile | Tyr | Pro |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Ala | Pro | Ile | Leu | Asp | Gly | Leu | His | Tyr | Ser | Val | Ser | Ser | Leu | Ile | Tyr |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |

Ser Ile Asn

&lt;210&gt; 43085

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43085

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| His | Arg | Ile | Val | Met | Arg | His | Leu | Asp | Phe | Val | Leu | Ser | Pro | Leu | Asp |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Gln | Phe | Glu | Val | Arg | Asp | Leu | Phe | Ser | Leu | Asn | Ala | Asn | Leu | Phe | Gly |  |  |

## 19439

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      20      25      30
Asn Ile His Leu Ser Leu Thr Asn Ile Gly Leu Tyr Leu Ser Ile Gly
      35      40      45
Leu Phe Leu Ile Leu Thr Tyr Ser Leu Leu Ala Thr Asn Asn Asn Lys
      50      55      60
Ile Ile Pro Asn Asn
65

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<210> 43086  
 <211> 191  
 <212> PRT  
 <213> A.fumigatus

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<400> 43086
Ser Ile Ser Gln Glu Ser Met Tyr Ala Thr Val His Ser Ile Val Val
1      5      10      15
Ser Gln Leu Asn Pro Thr Lys Gly Gln Leu Tyr Phe Pro Phe Ile Tyr
      20      25      30
Ala Leu Phe Ile Phe Ile Leu Ala Asn Asn Leu Ile Gly Leu Val Pro
      35      40      45
Tyr Ser Phe Ala Ser Thr Ser His Phe Ile Leu Thr Phe Ser Met Ser
      50      55      60
Phe Thr Val Val Leu Gly Ala Thr Phe Leu Gly Phe Gln Arg His Gly
65      70      75      80
Leu Lys Phe Phe Ser Leu Phe Val Pro Ser Gly Cys Pro Leu Ala Leu
      85      90      95
Leu Pro Leu Leu Val Leu Ile Glu Phe Ile Ser Tyr Leu Ser Arg Asn
      100      105      110
Val Ser Leu Gly Leu Arg Leu Ala Ala Asn Ile Leu Ser Gly His Met
      115      120      125
Leu Leu Ser Ile Leu Ser Gly Phe Thr Tyr Asn Ile Met Thr Ser Gly
      130      135      140
Val Leu Phe Phe Phe Leu Gly Leu Ile Pro Leu Ala Phe Ile Ile Ala
145      150      155      160
Phe Ser Gly Leu Glu Leu Ala Ile Ala Phe Ile Gln Ala Gln Val Phe
      165      170      175
Val Val Leu Thr Cys Ser Tyr Val Lys Asp Gly Leu Asp Leu His
      180      185      190

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<210> 43087  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43087
Leu Ala Thr Cys Tyr Gly Gly Ser Leu His Leu Thr Pro Pro Met Leu
1      5      10      15
Phe Ala Leu Gly Phe Val Val Leu Phe Thr Ile Gly Gly Leu Ser Gly
      20      25      30
Val Val Leu Ala Asn Ala Ser Leu Asp Val Ala Phe His Asp Thr Tyr
      35      40      45
Tyr Val Val Ala His Phe His Tyr Val Leu Ser Met Gly Ala Val Phe
      50      55      60
Ala Leu Phe Ser Gly
65

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## 19440

<210> 43088  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 43088

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Asn | Gln | Asn | Lys | Asn | Tyr | Tyr | Thr | Met | Asn | Phe | Ser | Ile | Phe | Leu |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Leu | Ile | Gly | Ile | Leu | Gly | Phe | Val | Leu | Asn | Arg | Lys | Asn | Ile | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Met | Leu | Ile | Ser | Ile | Glu | Ile | Met | Leu | Leu | Ser | Ile | Thr | Phe | Leu |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Ile | Leu | Ile | Ser | Ser | Leu | Ser | Phe | Asp | Asp | Ile | Leu | Gly | Gln | Thr | Phe |
|     |     |     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |
| Ala | Ile | Tyr | Ile | Ile | Thr | Ile | Ala | Gly | Ala | Glu | Ser | Ala | Ile | Gly | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Ile | Leu | Val | Ala | Tyr | Tyr | Arg | Leu | Arg | Gly | Ser | Ile | Ser | Ile | Gln |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

Tyr Lys

<210> 43089  
 <211> 264  
 <212> PRT  
 <213> A.fumigatus

<400> 43089

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Lys | Phe | Ile | Leu | Glu | Tyr | Tyr | Met | Leu | Leu | Ser | Ser | Ile | Phe | Cys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Leu | Leu | Ser | Asn | Ala | Leu | Ser | Phe | Arg | Arg | Asp | Thr | Thr | Ile | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Ser | Arg | Ile | Gly | Ile | Ile | Ala | Leu | Phe | Tyr | Cys | Ile | Tyr | Leu | Ser |
|     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Tyr | Asn | Asn | Leu | Phe | Ile | Thr | Tyr | Leu | Asp | Asn | Gly | Ile | Gly | Leu | Phe |
|     |     |     | 50  |     |     |     |     | 55  |     |     | 60  |     |     |     |     |
| Gly | Gly | Leu | Phe | Tyr | Thr | Ser | Ser | Ile | Thr | Gln | Val | Phe | His | Ile | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Phe | Ile | Ile | Ser | Leu | Leu | Ile | Leu | Asn | Met | Thr | Gly | Phe | Tyr | Pro |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Lys | Leu | Ile | Ser | Asn | Glu | Tyr | Met | Ser | Leu | Tyr | Lys | Leu | Leu | Phe |
|     |     |     |     | 100 |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Lys | Leu | Gln | Phe | Ile | Lys | Asn | Leu | Thr | Val | Ser | Asn | Ile | Ile | Leu |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Lys | Gly | Glu | Gln | Tyr | Thr | Ile | Leu | Glu | Tyr | Thr | Leu | Met | Leu | Phe |
|     |     |     | 130 |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Phe | Ile | Ile | Thr | Gly | Ser | Val | Leu | Leu | Ile | Ser | Ser | Ser | Asp | Leu | Val |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ser | Ile | Phe | Leu | Ser | Ile | Glu | Leu | Gln | Ser | Tyr | Gly | Leu | Tyr | Leu | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Cys | Ala | Met | Tyr | Arg | Asn | Ser | Glu | Ser | Ser | Thr | Ser | Ala | Ser | Leu | Thr |
|     |     |     |     | 180 |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Tyr | Phe | Leu | Leu | Gly | Gly | Leu | Ser | Ser | Cys | Phe | Ile | Leu | Leu | Gly | Ile |
|     |     |     |     | 195 |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ala | Leu | Ile | Tyr | Ala | Asn | Leu | Gly | Val | Thr | Tyr | Leu | Asp | Ser | Phe | Tyr |
|     |     |     |     | 210 |     |     | 215 |     |     |     |     | 220 |     |     |     |

Leu Ile Asn Asn Leu Ala Gly Ile Val Asp Glu Gln Glu Ile Thr Thr



## 19441

225                      230                      235                      240  
 Tyr Ile Pro Tyr Cys Leu Leu Leu Ile Ser Val Gly Phe Leu Phe Lys  
                                  245                      250                      255  
 Ile Ser Ala Ala Pro Phe His Phe  
                                  260

<210> 43090  
 <211> 241  
 <212> PRT  
 <213> A.fumigatus

<400> 43090  
 Thr Thr Ser Leu Leu Val Ser Ser Leu Leu Ser Leu Ile Ile Gly Thr  
 1                      5                      10                      15  
 Ile Leu Gly Leu Thr Gln Phe Arg Ile Lys Arg Leu Phe Ala Tyr Ser  
                                  20                      25                      30  
 Thr Ile Ser His Leu Gly Phe Met Leu Leu Ala Leu Thr Ile Asn Ser  
                                  35                      40                      45  
 Val Glu Ser Ile Gln Ser Phe Ile Phe Tyr Leu Ile Gln Tyr Ser Leu  
                                  50                      55                      60  
 Ser Asn Leu Asn Ala Phe Ile Leu Leu Val Ala Ile Gly Tyr Ser Leu  
 65                      70                      75                      80  
 Tyr Ala Tyr Asn Asp Lys Asn Ile Asn His Asn Asn Leu Val Asp Lys  
                                  85                      90                      95  
 Asn Asn Ser Pro Ile Gln Leu Ile Ser Gln Leu Lys Gly Tyr Phe His  
                                  100                      105                      110  
 Ile Asn Ser Met Leu Ala Leu Ser Leu Ser Ile Thr Leu Phe Ser Phe  
                                  115                      120                      125  
 Ala Gly Ile Pro Pro Leu Met Gly Phe Phe Ala Lys Gln Met Val Phe  
                                  130                      135                      140  
 Ser Ala Ala Leu Gln Glu Gly Phe Ile Phe Leu Thr Leu Ile Gly Val  
 145                      150                      155                      160  
 Leu Thr Ser Val Ile Ser Ala Val Tyr Tyr Leu Phe Ile Val Lys Thr  
                                  165                      170                      175  
 Met Phe Phe Asp Arg His Ser Tyr Thr Tyr Phe Ser Lys Leu Lys Asp  
                                  180                      185                      190  
 Leu Lys Ile Pro Ala Ile Ile Leu Gln Lys Asp Lys Glu Val Asn Arg  
                                  195                      200                      205  
 Ile Tyr Phe Asp Ser Lys Phe Ala Leu Ser Ser Ser Leu Ser Ile Thr  
                                  210                      215                      220  
 Ile Ser Ile Leu Thr Leu Ile Ile Leu Leu Phe Met Val Met Pro Asn  
 225                      230                      235                      240  
 Glu

<210> 43091  
 <211> 146  
 <212> PRT  
 <213> A.fumigatus

<400> 43091  
 Ile Ile Leu Leu Val Tyr Ile Tyr Ile Phe Phe Tyr Val Asn Lys Ile  
 1                      5                      10                      15  
 Lys Tyr Lys Met Ile Thr Ser Leu Ile Ser Ile Ile Glu Gly Leu Leu  
                                  20                      25                      30  
 Val Ile Val Pro Ala Leu Leu Ser Val Ala Phe Val Thr Ile Ala Glu

## 19442

35 40 45  
 Arg Lys Thr Met Ala Ser Met Gln Arg Arg Leu Gly Pro Asn Ala Val  
 50 55 60  
 Gly Tyr Tyr Gly Leu Leu Gln Ala Phe Ala Asp Ala Leu Lys Leu Leu  
 65 70 75 80  
 Leu Lys Glu Tyr Val Ala Pro Thr Gln Ala Asn Ile Ile Leu Phe Phe  
 85 90 95  
 Leu Gly Pro Val Ile Thr Leu Ile Phe Ser Leu Leu Gly Tyr Leu Val  
 100 105 110  
 Val Pro Phe Gly Ser Gly Leu Phe Ile Ser Asp Tyr Ser Leu Gly Leu  
 115 120 125  
 Leu Tyr Ala Leu Ala Val Ser Ser Leu Ser Thr Tyr Gly Ile Leu Leu  
 130 135 140  
 Ala Gly  
 145

&lt;210&gt; 43092

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43092

Ser Ala Asn Ser Lys Tyr Ala Phe Leu Gly Ser Leu Arg Ser Thr Ala  
 1 5 10 15  
 Gln Leu Ile Ser Tyr Glu Leu Ile Leu Ser Ser Val Ile Leu Leu Val  
 20 25 30  
 Leu Leu Leu Thr Gly Ser Leu Asn Met Ile Thr Ile Ile Glu Ser Gln  
 35 40 45  
 Arg Val Val Asn Phe Leu Phe Pro Leu Phe Pro Leu Phe Leu Val Phe  
 50 55 60  
 Phe Ile Gly Ser Ile Ala Glu Thr Asn Arg Ala Pro Phe Asp Leu Ala  
 65 70 75 80  
 Glu Ala Glu Ser Glu Leu Val Ser Gly Phe Met Thr Glu His Ser Ala  
 85 90 95  
 Ser Ile Phe Val Phe Phe Phe Leu Ala Glu Tyr Ala Ser Ile Val Leu  
 100 105 110  
 Ile Cys Val Leu Asn Ser Ile Leu Phe Leu Gly Gly Tyr Leu Ser Ile  
 115 120 125  
 Ile Pro Leu Asp Phe Ile Ile Tyr Ile Leu Asn Leu Phe Phe Asn Val  
 130 135 140  
 Asn Asp Thr Ile Leu Tyr Asp Ile Tyr Ile His Ile Ser Ser Ser Pro  
 145 150 155 160  
 Leu Asn Leu Ala Phe Lys Thr Ala Phe Leu Ile Cys Val Phe Ile  
 165 170 175

&lt;210&gt; 43093

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43093

Leu Ile Glu Tyr Thr Cys Thr Lys Leu Asp Thr Ile Asn Thr Gly Asn  
 1 5 10 15  
 Asn Ile Glu Thr Val Asn Glu Ser Asn Leu Lys Phe His Asn Thr Tyr  
 20 25 30  
 Asn Asp Ser Thr Ser Thr His Leu Ala Thr Phe Ile Val Thr Gly Ile

## 19443

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Leu Leu Lys Pro Thr Ser Lys Lys Ala Asn Ile Ala Lys Asn Val Val |     |     |
| 50  | 55  | 60  |
| Val Ile Thr Glu Val His Val Ile Ile Cys Ala Pro Leu Thr Pro Thr |     |     |
| 65  | 70  | 75  |
| Phe Leu Pro Lys Lys Pro Glu Ile Ile Glu Pro Asn Lys Gly Lys Ile |     |     |
| 85  | 90  | 95  |
| Ile Asn Val Lys Tyr Ile Ile Tyr Ile Val Leu Ile Tyr Phe Leu Leu |     |     |
| 100   | 105 | 110 |
| Ile Tyr Asn Met Leu Leu Lys Phe Leu Asn Leu Leu Gln Ile Leu Leu |     |     |
| 115   | 120 | 125 |
| Leu Leu Leu Leu   |     |     |
| 130   |     |     |

&lt;210&gt; 43094

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43094

|   |    |    |
|---|----|----|
| Arg Ile Val Trp Phe Ser Val Tyr Ile Ile Tyr Thr Ile Leu Ser Asp |    |    |
| 1   | 5  | 10 |
| Ile Leu Phe Phe Ser Phe Phe Ile Leu Ile Val Tyr Thr Asn Tyr Gly |    |    |
| 20  | 25 | 30 |
| Ser Thr Phe Trp Ile Ser Ile Thr Thr Leu Val Ile Ser Arg Ile Thr |    |    |
| 35  | 40 | 45 |
| Thr Ser Lys Ser Lys Lys Ile Ile Ser Phe Ile Thr Thr Thr His Ile |    |    |
| 50  | 55 | 60 |
| Lys Ser Thr Tyr Ile Tyr Ile Lys Ser Thr Tyr Ile Tyr Ile Lys Ser |    |    |
| 65  | 70 | 75 |
| Thr Cys Ile Tyr Ile Asn Phe Ile                                 |    |    |
| 85  |    |    |

&lt;210&gt; 43095

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43095

|   |    |    |
|---|----|----|
| Thr Ile Pro Thr Phe Ile Tyr Glu Tyr Glu Asn Phe Phe Tyr Tyr Ile |    |    |
| 1   | 5  | 10 |
| Lys Tyr Leu Phe Thr Tyr Phe Ile Ser Tyr Ile Ile Asn Asn Phe Asp |    |    |
| 20  | 25 | 30 |
| Ile Phe Phe Ile Ser Cys Lys Ile Asn Ile Thr Pro Cys Leu Phe Thr |    |    |
| 35  | 40 | 45 |
| His Arg Thr Ser His Arg Lys Ile Ser Leu Asn Thr Ser             |    |    |
| 50  | 55 | 60 |

&lt;210&gt; 43096

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43096

|   |   |    |
|---|---|----|
| Val Ile Val Thr Pro Asp Asp Asn Lys Ile Ile Val Phe Asn Asn Gly |   |    |
| 1   | 5 | 10 |
|   |   | 15 |

## 19444

```

Asn Ser Lys Gly Phe Thr Pro Cys Ile Pro Asn Gly Gly His Cys Ala
      20                25                30
Pro Asn Ser Ile Leu Gly Glu Ile Ala Leu Trp Lys Asn Ala Gln Lys
      35                40                45
Ile Ala Lys Lys Lys Asn Thr Ser Glu Ile Met Asn Lys Pro Thr Pro
      50                55                60
Lys Phe Asn Pro Phe Cys Thr Ala Phe Val
65                70

```

<210> 43097  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43097
Ser Gly Leu Phe Ile Phe Leu Ser Phe Tyr Lys Gly Phe Phe Pro Tyr
1      5                10                15
Phe Lys Val Ala Lys Leu Ser Phe Thr His Leu Tyr Thr Thr Thr Ile
      20                25                30
Gln Phe Ile Lys Leu Ile Ser Arg Ser Ile Ser Met Cys Gln Val Leu
      35                40                45
Gly Gln Arg Ser Ile Arg Ala Ile Ile Lys Leu Lys Lys Phe Leu Leu
      50                55                60
Asp Leu Ile Val Tyr Ile Ile Tyr Leu Tyr Cys
65                70                75

```

<210> 43098  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43098
Tyr Ala Thr Lys Ile Pro Lys Pro Ile Ala Asp Ser Ala Pro Ala Ile
1      5                10                15
Val Ile Ile Tyr Ile Ala Asn Val Cys Pro Asn Ile Ser Ser Lys Leu
      20                25                30
Ser Glu Leu Ile Asn Ile Lys Asn Val Ile Asp Asn Asn Ile Ile Ser
      35                40                45
Ile Glu Ile Asn Ile Ser Met Met Phe Phe Leu Phe Asn Thr Lys Pro
      50                55                60
Asn Ile Pro Ile Lys Asn Lys Lys Ile Glu Lys Phe Ile Val
65                70                75

```

<210> 43099  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43099
Pro Asp Ser Ile Leu Ala Ala Ser Leu Asn Pro Asn Asp Thr Phe Leu
1      5                10                15
Asp Lys Tyr Glu Met Asn Ser Ile Lys Thr Asn Lys Gly Asn Asn Ala
      20                25                30
Lys Gly Gln Pro Glu Gly Thr Asn Asn Glu Lys Asn Phe Asn Pro Cys
      35                40                45
Leu Trp Asn Pro Lys Asn Val Ala Pro Lys Thr Thr Val Lys Leu Ile

```

## 19445

|   |    |     |    |    |
|---|----|-----|----|----|
| 50  |    | 55  |    | 60 |
| Glu Asn Val Lys Ile Lys Cys Asp Val Asp Ala Lys Leu Tyr Gly Thr |    |     |    |    |
| 65  |    | 70  |    | 75 |
| Asn Pro Ile Lys Leu Phe Ala Asn Met Asn Ile Asn Asn Ala Tyr Ile |    |     |    |    |
|   | 85 |     | 90 | 95 |
| Asn Gly Lys Tyr Asn Cys Pro Phe Val Gly Leu Ser                 |    |     |    |    |
| 100   |    | 105 |    |    |

<210> 43100  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

|   |    |  |    |    |
|---|----|--|----|----|
| <400> 43100   |    |  |    |    |
| Asn Asn Asn Thr Ser Asn Thr Lys Asn Thr Ala Asn Asn Asn Val Ser |    |  |    |    |
| 1   | 5  |  | 10 | 15 |
| Asn Asn Asn Ile Ile Thr Thr Asn Asp Asn Thr Phe Cys Asp Cys Ile |    |  |    |    |
|   | 20 |  | 25 | 30 |
| Glu Phe Gln Phe Asp Asn Ile Ala Ile Gly Ile Ile Ile Val Val Asn |    |  |    |    |
|   | 35 |  | 40 | 45 |
| Asn Thr Lys Tyr Ile Asp Lys Pro Ser Thr Pro Lys Tyr Ile Ser Lys |    |  |    |    |
| 50  | 55 |  | 60 |    |

<210> 43101  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (31), (53)  
 <223> Identity of amino acid sequences at the above locations are unknown.

|   |    |  |    |    |
|---|----|--|----|----|
| <400> 43101   |    |  |    |    |
| Arg Ser Ser Lys His Ser Pro Thr Val Thr Ala Leu Leu Pro Tyr Ser |    |  |    |    |
| 1   | 5  |  | 10 | 15 |
| Gly Ile Leu Leu Asn Met Cys Ser Val Lys Leu Trp Asn Val Xaa Leu |    |  |    |    |
|   | 20 |  | 25 | 30 |
| Leu His Val Val Ser Asn Asn Asp Pro Glu Leu Leu Glu Thr Ser His |    |  |    |    |
|   | 35 |  | 40 | 45 |
| Gly Gln Gln Gly Xaa Thr Lys Arg Ile Ser Trp Lys Met Lys         |    |  |    |    |
| 50  | 55 |  | 60 |    |

<210> 43102  
 <211> 212  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (10), (32)  
 <223> Identity of amino acid sequences at the above locations are unknown.

|   |   |  |    |    |
|---|---|--|----|----|
| <400> 43102   |   |  |    |    |
| Phe Ile Phe Gln Glu Ile Arg Leu Val Xaa Pro Cys Cys Pro Trp Glu |   |  |    |    |
| 1   | 5 |  | 10 | 15 |

## 19446

Val Ser Arg Ser Ser Gly Ser Leu Leu Leu Thr Thr Cys Arg Ser Xaa  
 20 25 30  
 Thr Phe His Asn Leu Thr Glu His Met Leu Arg Arg Met Pro Glu Tyr  
 35 40 45  
 Gly Asn Lys Ala Val Thr Val Gly Glu Cys Leu Glu Asp Leu Gln Glu  
 50 55 60  
 Phe Trp Tyr Arg Glu Ala Gly Glu Pro Phe Ser Asn Asn Ala Val Arg  
 65 70 75 80  
 Ser Ser Ser Ser Pro Glu Leu His Asp Ala Pro Ser Thr Val Ser Lys  
 85 90 95  
 Pro Val Ser Pro Asp Gly Lys Cys Gly Lys Asp Tyr Thr Cys Ala Gly  
 100 105 110  
 Ser Ser Phe Gly Pro Cys Cys Ser Ser Ser Asn Tyr Cys Gly Thr Ser  
 115 120 125  
 Asn Leu His Cys Gly Phe Gly Cys Gln Pro Glu Ala Gly Asn Cys Phe  
 130 135 140  
 Ser Leu Asp Glu Pro Ser His Asn Asp Thr Asn Asp Phe Ile Arg Lys  
 145 150 155 160  
 Pro Thr Pro Arg Pro Gly Ser Asp His Ser Asn Asp Gly Gly Leu Pro  
 165 170 175  
 Gly Gly Gly Ser Ala Arg Lys Pro Val Lys Ser Gly Ala Asn Pro Ala  
 180 185 190  
 Val His Ala Leu Ser Ala Ala Ala Cys Leu Met Leu Phe Ile Cys Val  
 195 200 205  
 Met Ala Ile Ala  
 210

&lt;210&gt; 43103

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (94), (97)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43103

Glu Ser Arg Arg Arg Asn Ile Tyr Cys Phe Cys Leu Ser Arg Leu Pro  
 1 5 10 15  
 Leu Gly Thr Leu Val Arg Lys Ala Glu Met Gly Arg Phe Gly Val Gly  
 20 25 30  
 Gln Lys Asp Arg Val Thr Met Trp Gly Met Phe Tyr Ser Cys Asn Gly  
 35 40 45  
 Asn Asn Asp Asp Thr Asn Lys Met Ile Ile Arg Glu Asp Glu Asp Val  
 50 55 60  
 Ser Asn Ala Cys Leu Thr Thr Arg Ser Thr Ser Ile Ala His Ala Asn  
 65 70 75 80  
 Thr Trp Ser Ser Pro Arg Glu Arg Lys Asp Gln Glu Arg Xaa Phe Tyr  
 85 90 95  
 Xaa

&lt;210&gt; 43104

&lt;211&gt; 70

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (5), (26), (31), (39), (40)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43104

```

Pro Val Gly Asp Xaa Phe Leu Arg Trp Val Gln Phe Ser Thr Ser Glu
1          5          10          15
Leu Ala Ser Ile Phe Trp Gly Tyr Tyr Xaa Phe Pro Cys Gly Xaa Ile
          20          25          30
Ser Ser Val Leu Phe Val Xaa Xaa Ser Gly Arg Val Gly Ile Trp Thr
          35          40          45
Gln Ile Phe Ser Ala Asn His Gly Ile Arg Gly Arg Phe Pro Thr Val
          50          55          60
Ser Ala Thr Val Asn Val
65          70

```

<210> 43105

<211> 163

<212> PRT

<213> A.fumigatus

<400> 43105

```

Thr Ser Ser Phe Leu Arg Ala Ala Thr Ala Gly Thr Asp Leu Leu Ala
1          5          10          15
Pro Lys Leu His Asp Glu Asp Ser Val Glu Asp Asn Trp Arg Gly Val
          20          25          30
Val Asp Val Ile Asp Ala Leu Leu Glu Arg Ala Asp Ala Cys Leu Asp
          35          40          45
Glu Phe Thr Gly Val Ile Lys Lys Leu Ser Pro Ser Gln Gln Glu Gln
          50          55          60
Ser Ala Ala Lys Ala Ala Lys Lys Ala Ser Pro Lys Phe Pro Ser Val
65          70          75          80
Tyr Asp Phe Gly Pro Ser Lys Ile Pro Lys Pro Gln Leu Leu Phe Glu
          85          90          95
Arg Pro Pro Asp Asn Thr Asp Val Ser Pro Phe Lys Pro Leu Leu Arg
          100          105          110
Ile Lys Pro His Ala Ile Val Pro Leu Glu Asp Ser Leu Lys Leu Thr
          115          120          125
Asp Pro Ala Gln Gly Tyr Arg Asn Pro Tyr Glu Thr Glu Ile Gln Ala
          130          135          140
Ala Lys Tyr Pro Glu Ser Thr Tyr Thr Val Ser Pro Pro Gly Arg Val
145          150          155          160
Pro Ala Val

```

<210> 43106

<211> 101

<212> PRT

<213> A.fumigatus

<400> 43106

```

Ser Ile Cys Arg Leu Pro Arg Cys Leu Ala Leu Arg Ala Met Asn Thr
1          5          10          15

```

## 19448

Val Glu Gly Ser Asp Ser Ile Leu Thr Ala Thr Arg Tyr Lys Gly Met  
                   20                  25                  30  
 Ala Ala Pro Ala Pro Gly Gly Gly Ala Gln Ser Pro Arg Lys Ser Val  
                   35                  40                  45  
 Ser Pro Gln Asn Thr Gly Phe Ser Gln Ile Gln Ala Arg Asn Leu Gly  
                   50                  55                  60  
 Glu Gly Gly Ser Ala Gln Gln Met Ser Val Leu Leu Ser Trp His Glu  
 65                  70                  75                  80  
 Lys Leu Val Glu Leu Thr Gly Thr Gly Ser Ile Val Arg Val Met Thr  
                   85                  90                  95  
 Asp Arg Arg Thr Val  
                   100

&lt;210&gt; 43107

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43107

Pro Leu Val Ser Arg Gln Arg Thr Leu Asp Asp Glu Glu Leu Asp Ser  
 1                  5                  10                  15  
 Gly Asp Asp Ile Asp Arg Tyr Asp Arg Ala Gly Asp Leu Met Asp Glu  
                   20                  25                  30  
 Asp Gly Val Glu Gly Asp Tyr Gln Glu Thr Val Asn Ile Met Asp Leu  
                   35                  40                  45  
 Ser Leu Gly Arg Ala Pro Glu Pro Val Thr Ser Asn Gly Glu Val Gly  
                   50                  55                  60  
 Pro Val Gly Pro Lys Lys Ser Met Leu Ser Cys Trp Leu Thr Leu Tyr  
 65                  70                  75                  80  
 Thr Gln Val Tyr Thr Met Pro Val Pro Thr Phe Leu Ser Ile Glu Thr  
                   85                  90                  95  
 Glu Glu Phe Asp Pro Glu Thr Tyr Val Ala Pro Pro Phe Asn Thr Ala  
                   100                  105                  110  
 Ala Thr Ser Leu Cys Trp Arg His Asp Pro Asn Asp Glu Ser  
                   115                  120                  125

&lt;210&gt; 43108

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (145), (146), (147), (148), (149), (150), (151), (152), (153), (154), (155), (156)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43108

Ala Val Glu Ser Pro Asn Ala Ile Met Gly Gln Ala Asp Ala Ala Gly  
 1                  5                  10                  15  
 Phe Ser Gly Ser Ser His Gly Asn Ala Thr Gln Gly Ala Glu Asp Leu  
                   20                  25                  30  
 Ser Ser Ala Ala Ser Asp Ile Asp Met Asn Asp Val Thr Asp Ala Cys  
                   35                  40                  45  
 His Gly Asp Val Ala Pro Thr Ser Ser Ser Ser Phe Glu Ser Met Ile  
                   50                  55                  60  
 Ile Arg Thr Pro Asn Glu Asp Leu Pro Tyr Leu Phe Val Gly Ser Gly



## 19449

```

65              70              75              80
Ser Cys Asn Pro Leu Asp Pro Lys Ala Ser Asn Cys Leu Gly Leu Ala
              85              90              95
Leu Val Arg Ser Ile Asp Val Pro Ser Arg Lys Leu Glu Leu Ile Thr
              100              105              110
Pro Ile Pro Ala Ser Lys Leu Arg Asp Ala Leu Glu Gln Gly His Gly
              115              120              125
Ile Val Leu Val Arg Gly Met Leu Asp Asn Pro Ser Trp Ala Val Phe
              130              135              140
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Val Thr
145              150              155

```

&lt;210&gt; 43109

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (24), (39), (52)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43109

```

Ser Pro Pro Ile Leu Ala Phe Thr Lys Ile Thr Gly Pro Asp Lys Leu
1              5              10              15
Thr Lys Trp Val Phe Ala Gln Xaa Pro Ser Val Phe Lys Glu Val Asn
              20              25              30
Pro Ala Val Lys Gln Glu Xaa Glu Arg Ala Leu His Glu Gln Lys Leu
              35              40              45
Ala Lys Met Xaa Ala Glu Met Lys Met Val Phe Gln Gln Lys Val Ala
              50              55              60
Glu Lys Glu Ser Lys Leu Lys Gln Ser Glu Asp Glu Leu Tyr Ala Arg
65              70              75              80
His Arg Glu Met Lys Asp Gln Leu Glu Arg Gln Arg Gln Glu Leu Glu
              85              90              95
Glu Lys Lys Ala Arg Leu Glu Ser Gly Arg Pro Ile Glu Glu Lys Gly
              100              105              110
Lys Arg Lys Gly Phe Ser Leu Arg
              115              120

```

&lt;210&gt; 43110

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43110

```

Asp Ala Leu Pro Ser Ser Pro Val Gly Val Asp Asp Tyr Ser Thr Pro
1              5              10              15
Gln His Gly Lys Ile His Asp Ala Lys Ala Lys Lys Arg Ser Lys Ser
              20              25              30
Arg Leu Ser Thr Ser Arg Arg Arg Glu Met Glu Leu Leu Ile Asn Thr
              35              40              45
Pro Pro Ser Ile Ala Glu Glu Glu Pro Thr Asp Asp His Ala Asn Phe
              50              55              60
Thr Ala Thr Pro Ser Ser Glu Ala Ile Thr Ser Glu Ser Ala Ile Tyr
65              70              75              80

```

## 19450

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Gly | Met | Asn | Val | Leu | Cys | Ala | Pro | Phe | Leu | Tyr | Val | Ala | Arg |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Glu | Val | Glu | Ala | Phe | Ala | Leu | Phe | His | Tyr | Phe | Met | Thr | Ser | Glu |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Cys | Pro | Gly | Tyr | Ile | Arg | Gly | Ala | Met | Asp | Gly | Val | His | Arg | Gly | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Leu | Val | Asp | Arg | Cys | Leu | Glu | Ile | Val | Glu | Pro | Lys | Leu | Ala | Ala |
|     |     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Tyr | Leu | Phe | Ser | Lys | Gly | Met | Gln | Ala | Glu | Leu | Tyr | Ala | Phe | Pro | Ser |
|     |     | 145 |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | Leu | Thr | Leu | Cys | Ala | Cys | Thr | Pro | Pro | Leu | Pro | Glu | Val | Leu | His |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Leu | Trp | Asp | Phe | Leu | Phe | Ala | Tyr | Gly | Pro | His | Leu | Asn | Ile | Leu | Cys |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Val | Ala | Gln | Leu | Ile | Arg | Met |     |     |     |     |     |     |     |     |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     |     |     |     |     |

&lt;210&gt; 43111

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (149)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43111

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Asn | Pro | Gln | Arg | Gly | Val | Phe | Ala | Ile | Phe | Ser | Ala | Ala | Asp | Tyr |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Val | Tyr | Ser | Leu | Pro | Thr | Leu | Glu | Leu | Tyr | Pro | Cys | Arg | Arg | His |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Asp | Val | Leu | Val | Val | Asp | Arg | Leu | Ser | Arg | Gly | Ala | Thr | Pro | Ser |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Leu | Ala | Val | Phe | Ser | Asp | Ala | Gly | Ser | Val | Glu | Glu | Thr | Lys | Glu | Gly |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Asp | Pro | Ser | Thr | Ala | Ala | Ser | Ile | His | Tyr | Val | Cys | Thr | Ser | Ser |
|     |     | 65  |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Cys | Ala | Leu | Ile | Tyr | Ser | Ala | Asp | His | Phe | Leu | Ile | Cys | Gly | Arg | Arg |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Phe | Gly | Thr | Val | Ala | Leu | Leu | Leu | Gln | Leu | Ile | Pro | Gly | Leu | Ser | Met |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Phe | Leu | Met | Ser | Thr | Ala | Ala | Gly | Ser | Ala | Leu | Trp | Val | Lys | Asp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Ile | Glu | Asn | Lys | Arg | Asp | Ala | Leu | Arg | Gly | Thr | Ser | Ser | Pro | Gln | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Gly | Arg | Ser | Xaa | Ala | Lys | Arg |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     |     | 150 |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43112

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (120)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43112

```

Ser Gln Gly Met Arg Ser Leu Leu Ala Ala Ile Cys Leu Ser Phe Glu
1           5           10           15
Gly Pro Asp Asp Asp Leu Ile Gln Gln Ile Phe Pro Arg Trp Val Arg
          20           25           30
Tyr Ser Ala Leu Leu Thr Val Asn Val Phe Val Phe Met Gly Asn Met
          35           40           45
Tyr Ser Val Arg Thr Asp Asp Ser Ser Leu Pro Asp Asn Gln Gly Leu
          50           55           60
Thr Ile Phe Ile Gln Ser Gly Ile Ala Thr Gly Phe Gly Ser Leu Ala
65           70           75           80
Glu Asp Leu Gln Leu Pro Phe Glu Lys Leu Ser Asp Leu Ile Ser Tyr
          85           90           95
Ser Val Leu Ala Met Gly Leu Ala Asn Ile Phe Trp Met Pro Leu Ala
          100          105          110
Leu Cys Phe Gly Lys Arg Pro Xaa
          115          120

```

&lt;210&gt; 43113

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (200)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43113

```

Tyr Cys Gly Trp Phe Gly Phe Gln Arg Thr Pro Ile Thr Ser Leu His
1           5           10           15
Tyr Met Ile Phe Val Leu Ala Pro Leu Cys Arg His Ser Met Ala Cys
          20           25           30
Val His Gln Ile Ala Cys Leu Thr His Asp Leu Ala Asn Val Phe Leu
          35           40           45
Gln Asn Phe Phe Asn Ile Ile Asn Gly Glu Thr Val Ser Ser Ala Val
          50           55           60
Thr Gln His Gly Ile Asn Pro Ala Asn Lys Glu Pro Asn Pro Pro Val
65           70           75           80
Pro Val Ala Ser Pro Ala Glu Leu Asp Lys Ala Val Ala Ala Ala Gln
          85           90           95
Val Ala Phe Glu Gln Trp Ser Pro Phe Pro Leu Glu Asp Arg Arg Lys
          100          105          110
Ala Leu Phe Ala Tyr Ser Asp Ala Leu Asn Ala Glu Lys Asp Gly Phe
          115          120          125
Thr Ser Leu Leu Thr Lys Glu Gln Gly Lys Pro Leu Ser Gln Ala Ala
          130          135          140
Met Glu Val Glu Met Ala Val Ala Trp Ile Lys Gly Leu Ala Ser Leu
          145          150          155          160
Glu Ile Pro Glu Val Val Leu Glu Asn Ser Ser Glu Arg Lys Ile Val
          165          170          175
Gln Arg Phe Thr Pro Ile Gly Val Gly Leu His Gln Gly Arg Lys Ser
          180          185          190

```

Val His Phe Lys Gly Pro Gln Xaa  
195 200

<210> 43114

<211> 194

<212> PRT

<213> A.fumigatus

<400> 43114

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Thr | His | Ser | Ala | Asp | Ser | Ser | Ala | Ala | Cys | Gly | Glu | Asp | Gly | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Cys | Ile | Phe | Met | Asn | Arg | Ile | Ser | Ser | Glu | Thr | Ile | Phe | Thr | Thr | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Asp | Ser | Glu | Ser | Thr | Gly | Leu | Val | Gly | Val | Asn | Arg | Lys | Gly | Gln |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Leu | Ser | Val | Ser | Val | Asp | Glu | Gly | Thr | Ile | Ile | Gln | Tyr | Leu | Met |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Asn | Pro | Ala | Met | Ser | Gly | Leu | Ala | Val | Lys | Leu | Ala | Ser | Lys | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly | Leu | Pro | Gly | Ala | Asp | His | Leu | Tyr | Gln | Gln | Gln | Phe | Asp | Asn | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Ala | Gln | Gly | Asn | Tyr | Ser | Glu | Ala | Ala | Lys | Ile | Ala | Ala | Asn | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Pro | Arg | Gly | Phe | Leu | Arg | Thr | Pro | Glu | Thr | Ile | Asn | Arg | Phe | Lys | Asn |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Pro | Gln | Thr | Gly | Gln | Gln | Met | Ser | Val | Ile | Leu | Gln | Tyr | Phe | Gly |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Met | Leu | Leu | Asp | Lys | Gly | Ser | Leu | Asn | Lys | Tyr | Glu | Ser | Val | Glu | Leu |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |     |
| Val | Arg | Pro | Val | Leu | Gln | Gln | Asn | Arg | Lys | His | Leu | Leu | Glu | Lys | Trp |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Met | Arg | Glu | Asn | Lys | Leu | Glu | Thr | Ser | Glu | Glu | Leu | Gly | Asp | Ile | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

Arg Pro

<210> 43115

<211> 70

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (58), (59), (60), (61), (62), (63), (64), (65), (66), (67), (70)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43115

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ala | Asn | Lys | Leu | Gly | Arg | Arg | Pro | Tyr | Leu | Val | Glu | Ala | Ala | Gln |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Leu | Glu | Leu | Gly | Gln | Phe | Leu | Tyr | Ser | Ala | Leu | Glu | Val | Glu | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Glu | Thr | Trp | Tyr | Leu | Gly | Val | Asn | Ile | Cys | Gln | Arg | Tyr | Ile | Asn |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Arg | Leu | Leu | Ser | Arg | Arg | His | Val | Phe | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

Xaa Xaa Xaa Val Phe Xaa

## 19453

65

70

&lt;210&gt; 43116

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43116

```

Pro Leu Val Ser Arg Gln Arg Thr Leu Asp Asp Glu Glu Leu Asp Ser
1          5          10          15
Gly Asp Asp Ile Asp Arg Tyr Asp Arg Ala Gly Asp Leu Met Asp Glu
          20          25          30
Asp Gly Val Glu Gly Asp Tyr Gln Glu Thr Val Asn Ile Met Asp Leu
          35          40          45
Ser Leu Gly Arg Ala Pro Glu Pro Val Thr Ser Asn Gly Glu Val Gly
          50          55          60
Pro Val Gly Pro Lys Lys Ser Met Leu Ser Cys Trp Leu Thr Leu Tyr
65          70          75          80
Thr Gln Val Tyr Thr Met Pro Val Pro Thr Phe Leu Ser Ile Glu Thr
          85          90          95
Glu Glu Phe Asp Pro Glu Thr Tyr Val Ala Pro Pro Phe Asn Thr Ala
          100          105          110
Ala Thr Ser Leu Cys Trp Arg His Asp Pro Asn
          115          120

```

&lt;210&gt; 43117

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (11), (14), (64)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43117

```

Lys Ile Pro Ser Gly Gly Phe Pro Ser Ser Xaa Ser Asp Xaa Trp Asn
1          5          10          15
Pro Arg Lys Thr Arg Thr Leu Val Phe Arg Ile Trp Gly Asn Gly Glu
          20          25          30
Gln Leu Ser Leu Gly Phe Ile Ala Ile Cys Ala Arg Ala Gly Asn Pro
          35          40          45
Arg Phe Cys Leu Phe His Cys Ser Thr Arg Val Ser Gly Ile Phe Xaa
          50          55          60
Trp Phe Arg Arg Ala Thr Cys Asn Val Gly Leu Gly Ser Arg Met Ile
65          70          75          80
Gly Ala Met Thr Thr Asp His Gln Leu Pro Gln Val Phe Gly Lys Val
          85          90          95
Thr Lys Lys Gly Val Pro Tyr Val Ala Val Ile Ala Ala Trp Leu Phe
          100          105          110
Gly Pro Leu Ala Tyr Leu Ser Lys Ser Leu Arg Leu Val Ile Ile Ala
          115          120          125
His Asp
          130

```

&lt;210&gt; 43118

19454

<211> 123  
<212> PRT  
<213> A.fumigatus

<400> 43118  
Tyr Ile Arg Phe Tyr Ala Ala Leu Lys Ala Gln Gly Ile His Arg Asp  
1 5 10 15  
Thr Leu Pro Trp Lys Gly Pro Leu Gln Pro Tyr Ala Ala Trp Val Gly  
20 25 30  
Phe Ile Gly Ser Thr Ile Ile Thr Leu Val Ala Gly Phe Pro Val Phe  
35 40 45  
Leu Lys Gly Asn Trp Asn Thr Ser Asp Phe Val Ala Ser Tyr Ile Gly  
50 55 60  
Ile Pro Ile Phe Ile Val Pro Ile Ile Gly Trp Lys Phe Trp His Arg  
65 70 75 80  
Thr Lys Val Arg Pro Arg Ser Leu Tyr Val Gly Lys Glu Ala Asn Gly  
85 90 95  
Cys Ser Leu Leu Ala Gln Pro Leu Leu Thr Tyr Gly Leu Ala Val Ser  
100 105 110  
Arg Arg Glu Arg Leu Leu Arg Asn Thr Gly Arg  
115 120

<210> 43119  
<211> 78  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (2), (24)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43119  
Val Xaa Gly Ser Met Lys Asp Ile Asn Lys Gly Asn Gly Ile Ile Tyr  
1 5 10 15  
Trp Gly Ile Glu Tyr Met Leu Xaa Leu Phe Thr Phe Gly Val Thr Gly  
20 25 30  
Lys Trp Met Gly Ile Thr Leu Ile Ala Leu Leu Glu Ile Phe Thr Tyr  
35 40 45  
Asn Pro Tyr Lys Gly Arg Gly Gln Ala Ser Asn Ser Ile Lys Gly Phe  
50 55 60  
Gln Leu Asn Phe Glu Ser Phe Pro Met Val Leu Gln Lys Gly  
65 70 75

<210> 43120  
<211> 67  
<212> PRT  
<213> A.fumigatus

<400> 43120  
Tyr Phe Asp Pro Ser Phe Cys Ala His Phe Ala Lys Leu Arg Gly Leu  
1 5 10 15  
Cys Gly Cys Thr Thr Ala Leu Ile Ile Ala Gln Ser Gly Trp Ser Arg  
20 25 30  
Gly Gly Arg Thr Ser Ser Tyr Met Ala Leu Ala Ile Asp Ser Asp His  
35 40 45

## 19455

His Ala Glu Ser Leu Val Thr Tyr Trp Ile Tyr Leu Tyr Phe Phe Thr  
 50 55 60  
 Arg Asn Gly  
 65

<210> 43121  
 <211> 157  
 <212> PRT  
 <213> A.fumigatus

<400> 43121  
 Pro Tyr Leu Leu Asp Pro Gly Ala Leu Val Tyr Asp Pro Cys Ile Gly  
 1 5 10 15  
 Gln Phe Asp Tyr Val Gln Glu Glu Val Pro Ala Val Pro Phe Val Gln  
 20 25 30  
 Gln Asn Ala Asn Leu Phe Asn Phe Asn Ala Ser Phe Met Ala Glu Leu  
 35 40 45  
 Glu Arg Leu His Gln Thr Cys Gly Tyr Gln Asp Phe Ile Asp Lys Tyr  
 50 55 60  
 Leu Val Phe Pro Pro Ser Gly Val Gln Pro Pro Lys Met Phe Asn Tyr  
 65 70 75 80  
 Thr Ser Asp Ala Glu Cys Asp Val Phe Asp Met Ile Asn Thr Ala Ala  
 85 90 95  
 Met Ala Val Asn Pro Cys Phe Asp Ile Tyr Glu Ile Asn Leu Met Cys  
 100 105 110  
 Pro Leu Ala Trp Asp Val Leu Ala Phe Pro Thr Glu Leu Val Tyr Gln  
 115 120 125  
 Pro Ala Gly Ala Thr Val Tyr Phe Asp Arg Glu Asp Val Lys Arg Ala  
 130 135 140  
 Leu His Ala Pro Ser Ile Lys Trp Ala Glu Cys Ala Asp  
 145 150 155

<210> 43122  
 <211> 140  
 <212> PRT  
 <213> A.fumigatus

<400> 43122  
 Val Ile Lys Gln Asp Leu Leu Ile Asn Ser Asp Val Pro Asp Arg Ile  
 1 5 10 15  
 Gly Trp Ala Phe Gly Leu Gly Leu Glu Arg Ile Ala Met Leu Leu Phe  
 20 25 30  
 Asn Ile Pro Asp Ile Arg Leu Phe Trp Ser Arg Asp Glu Arg Phe Leu  
 35 40 45  
 Ser Gln Phe Lys Ala Gly Gln Ile Thr Arg Phe Glu Pro Phe Ser Lys  
 50 55 60  
 His Pro Ala Cys Tyr Lys Asp Val Ala Phe Trp Leu Pro Ser Ala Ala  
 65 70 75 80  
 Val Ser Gly Gly Ser Ala Ala Gly Gly Ala Val Pro Ile His Glu Asn  
 85 90 95  
 Asp Ile Met Glu Ile Val Arg Gly Val Ala Gly Asp Leu Val Glu Asp  
 100 105 110  
 Val Arg Leu Ile Asp Glu Phe Thr His Pro Lys Thr Gly Arg Lys Ser  
 115 120 125  
 Met Cys Tyr Arg Ile Asn Tyr Arg Ser Leu Glu Arg  
 130 135 140

<210> 43123  
 <211> 194  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (177)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43123  
 Ser Leu Ser Lys Trp Gln Tyr Asp Ser Gln Ile Ala His Glu Leu Gly  
 1 5 10 15  
 Lys Val Pro Pro Leu Asp Met Ala Arg Glu Leu Met Met Val Tyr Phe  
 20 25 30  
 Lys Val Trp His Pro Leu Phe Pro Phe Leu His Gly Pro Ser Phe Leu  
 35 40 45  
 Arg Ala Met Glu Leu Leu Tyr Ser Asp Ser His Gly Thr Glu Gly Gln  
 50 55 60  
 Asn Tyr Gly Asn Ile Pro Ser Thr Ser Thr Ser Thr Ser Thr Ser Met  
 65 70 75 80  
 Asp His Arg Asn Ala Cys Trp Thr Thr Ile Phe Gln Cys Val Phe Asn  
 85 90 95  
 Leu Ala Ser His Leu Arg Pro Asp Leu Ser Leu Pro Pro Glu Ser Arg  
 100 105 110  
 Ile Lys Ser Pro Gly Ser Met His Ser Leu Leu Ala Ile Leu Thr Arg  
 115 120 125  
 Arg Gln Asp Leu Pro Ser Leu Gln Ala Leu Leu Ala Ala Gln Leu Tyr  
 130 135 140  
 Leu Val Ala Lys Met Ser Leu Arg Thr Ala Ser Thr Val Gly Gly Ser  
 145 150 155 160  
 Ile Leu Arg Ser Met Leu His Ala Gly Leu His Pro Met Pro Val Ser  
 165 170 175  
 Xaa Ser Thr Arg Pro Gly Arg Lys Gln His Val Pro Glu Leu Glu Gly  
 180 185 190  
 Ser Arg

<210> 43124  
 <211> 115  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (78), (79), (80), (81), (82), (83)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43124  
 Pro Pro His Pro Leu Arg Leu Leu Pro Ala Val Val Lys Thr Arg Ser  
 1 5 10 15  
 Ser Glu Gly Leu Ser Leu Asp Lys Ile Leu Tyr Gly Phe Gly Ile Phe  
 20 25 30  
 Tyr Ala Gln Gly Gln Lys Ile Phe Pro Glu Ala Ala Thr Leu Gly Thr  
 35 40 45



# 19457

Val Phe Tyr Val Gly Ser Ile Ser Cys Leu Ser Trp Gln Arg Ala Arg  
 50 55 60  
 Ser Leu Val His His Phe Gly Lys Val Leu Lys Ala Ala Xaa Xaa Xaa  
 65 70 75 80  
 Xaa Xaa Xaa Ser Ala His Val Ala Leu Trp Trp Leu Ser Arg Arg Leu  
 85 90 95  
 Ile Glu Thr Leu Tyr Leu Met Asn Thr Phe Gly Arg Ser Val Asn Lys  
 100 105 110  
 Ser Ser Met  
 115

<210> 43125  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43125  
 Arg Pro Asn Asn Leu Pro His Leu Pro Asn Glu Ile Ile Leu Val Ile  
 1 5 10 15  
 Ala Gly Tyr Leu Asn Pro His Asp Leu Leu Leu Tyr Ala Ile Pro  
 20 25 30  
 Gly Ile Ile Pro Leu Leu Asn His Ala His Arg Thr Ala Val Asp Thr  
 35 40 45  
 Glu Gly Asn Thr Leu Leu His Ile Ala Ala Val Asn Asn Ile Ala Tyr  
 50 55 60  
 His Ser Ile Tyr Gln Thr Asp Trp Pro Leu Leu Ser Gln Thr  
 65 70 75

<210> 43126  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 43126  
 Asp His Leu Phe Asn Tyr Ser Val His Ile Lys Ile Ile His Leu Ser  
 1 5 10 15  
 Ile Ala Ser Ile Arg Ile Asp Tyr Trp Val Tyr Cys Leu Ser Ile Leu  
 20 25 30  
 Gln Met Lys Met Pro Ile Phe Ser Ser Thr Pro Ser Thr Ser Val Val  
 35 40 45  
 Asp Ala Val Ser Leu Tyr Ser Thr Thr Lys Pro Leu Val  
 50 55 60

<210> 43127  
 <211> 216  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (213), (214)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43127  
 Gln Ile Leu Lys Tyr Asp Gly Val Val Pro His Ser Arg His Ser Arg  
 1 5 10 15

## 19458

```

His Thr Arg Thr Pro Tyr Gly Val Gln Arg Val Ala Ser Pro Val Leu
      20      25      30
Lys Gln Ser Gln Arg Ala Lys Thr Pro Glu Lys Ser Thr Met Ala Glu
      35      40      45
Arg Pro Arg Pro Thr Val Leu Arg Arg Val Leu Thr Ala Ile Ile Asp
      50      55      60
Pro Val Asp Arg Glu Glu Gln Gly Tyr His Gln Tyr Pro Thr Met Arg
      65      70      75      80
Gly Leu His Asp Pro Glu Asn Glu Gly Leu Ser Met Gly Ser Ala Asn
      85      90      95
Asn Pro Gln Leu Ala Arg Arg Leu Thr Val Ala Thr Thr His Ala Ser
      100      105      110
Thr Leu Ile Pro Pro Ser Asp Lys Leu Leu Val Phe Arg Ala Leu Thr
      115      120      125
Gly Ile Asp Thr Val Pro Ala Leu Ala Ile Pro His His His Pro Arg
      130      135      140
Ser Ala Pro Asn Val Gly Ile Tyr Thr Arg Val Val Arg Ala Glu Gln
      145      150      155      160
Ala Ala Ala Gln Gln Phe Arg Phe Phe Ser Ile Leu Met Asn Thr Cys
      165      170      175
Leu Gly Ile Gln Ile Val Val Ala Ala Ala Leu Thr Ala Leu Gly Ala
      180      185      190
Ala Arg Gly Pro His Asn Ala Val Ser His Thr Gly Leu Glu Gly Tyr
      195      200      205
Ala Val Ser Ala Xaa Xaa Asn Pro
      210      215

```

&lt;210&gt; 43128

&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (155), (163), (193)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43128

```

Trp Val Leu Tyr Leu Tyr Asn Ser Ala Asn Gly Asp Thr Gly Ser Asn
1      5      10      15
Gln Trp Ser Glu Asp Asp Lys Leu Val Gly Arg Glu Val Phe Thr Trp
      20      25      30
Gln Ser Val Leu Asp Val Trp Gln Arg Gly Ala Glu Ala Thr Arg Trp
      35      40      45
Arg Ile His Asp Ser His Leu Val Trp Asp Arg Phe Leu Asp Leu Gln
      50      55      60
Val Gln Asp Leu Ser Arg Arg Pro Ser Gln Glu Arg Ala Ser Gln Val
      65      70      75      80
Lys Ala Phe Phe Asp Val Arg Leu Gln Thr Pro His Ala Thr Trp Asp
      85      90      95
Gln Thr Phe Gln Ala Phe Ser Gly Phe Val Ser Thr Tyr Tyr Asn Ala
      100      105      110
Asn Tyr Glu Glu Ile Met Ala Asp Thr Ala Gly Arg Leu Ala Thr Pro
      115      120      125
Val Lys Glu Lys Tyr Asn Ala Arg Glu His Leu Glu Ile Lys Leu Arg
      130      135      140

```

## 19459

```

Asn Ala Val Asp Ala Gly Glu Phe Gly Leu Xaa Trp Ala Ala Tyr Ser
145          150          155          160
Glu Tyr Xaa Asp Trp Glu Val Ser Arg His Arg Arg Arg Arg Gln Ser
          165          170          175
Asp Phe Asp Leu Val Asn Ala Ile Tyr Gln Arg Ala Val Leu Arg Phe
          180          185          190
Xaa Asp Asp Ser Asn Leu Trp Glu Asp Tyr Val Met Phe Leu Ile Asp
          195          200          205
Gln Asn Thr His Gly Asn Ala Gly Ala Thr Thr Ile Ser Thr Leu Asp
          210          215          220
Arg Ala Thr Arg His Trp Pro Cys Ser Gly Thr Leu Trp Ser Gln Tyr
225          230          235          240
Leu Leu Ser Ser Glu Arg Gly Trp Gln Ser Phe Gln Pro Asp Arg
          245          250          255

```

&lt;210&gt; 43129

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43129

```

His Ile Ala Gly Ile Arg Asn Ala Pro Val Pro Phe Phe Ile Lys Pro
1          5          10          15
Leu Thr Gly Met Val Ala Ser Lys Val Glu Gln Ala Phe Val Thr Pro
          20          25          30
Asn Leu Thr Ser His Phe Glu Phe Leu Glu Asp Gln Leu Lys Thr Val
          35          40          45
Pro Gly Gly Gly Pro Tyr Leu Cys Gly Lys Glu Leu Thr Ala Ala Asp
          50          55          60
Ile Met Met Ser Phe Pro Val Ile Ala Ser Leu Ile Lys Met Pro Asp
65          70          75          80
Leu Arg Gly Arg Tyr Pro Arg Leu Ala Glu Tyr Thr Asp Gln Leu Gln
          85          90          95
Ala Met Asp Gly Tyr Lys Arg Ala Val Ala Lys Val Glu Glu Ile Glu
          100          105          110
Gly Ser Phe Ser Ala Tyr Ala
          115

```

&lt;210&gt; 43130

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43130

```

Tyr Ser Asp Ser Gly Ser Gln Tyr Ala Lys Ser Glu Asn Cys Pro Leu
1          5          10          15
Asn Val Cys Cys Ser Glu Tyr Gly Phe Cys Gly Thr Thr Thr Gly Phe
          20          25          30
Cys Gly Asp Ala Thr Val Ala Glu Pro Val Cys Asp Gly Thr Ser Ala
          35          40          45
Thr Lys Lys Thr Ile Ala Tyr Tyr Glu Gly Trp Asn Ser Glu Arg Ala
          50          55          60
Cys Asp Thr Met Pro Pro Glu Asn Ile Pro Ile Gly Gly Tyr Thr His
65          70          75          80
Ile Asn Phe Ala Phe Leu Tyr Ile Asp Pro Asp Leu Tyr Thr Ile Lys
          85          90          95

```

## 19460

Pro Met Glu Thr Ser Gln Gln Glu Leu Tyr Ser Arg Val Thr Ala Leu  
                   100                  105                  110  
 Lys Lys Arg Lys Asn Gly Leu Glu Val Trp Ile Ser Ile Gly Gly Trp  
                   115                  120                  125  
 Ala Phe Asn Asp Pro Gly Pro Thr Ala Asn Thr Phe Ser Glu Leu Ala  
                   130                  135                  140  
 Ala Ser Lys Ser Lys Gln Ser Thr Phe Phe Glu Ser Leu Leu Ser Phe  
                   145                  150                  155                  160  
 Leu Asp Lys Tyr Gly Phe Asp Gly Val Asp Leu Asp Trp Tyr Cys  
                   165                  170                  175

<210> 43131  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<400> 43131  
 Thr Lys Ala Val Leu Lys Phe Ile Ala Pro Tyr Thr Arg Phe Ser Leu  
 1                  5                  10                  15  
 Ser Phe Ile Ser Lys His Ile Lys Ile Ser Val Pro Glu Val Gln Asp  
                   20                  25                  30  
 Ile Leu Ser Tyr Leu Ile Leu Asp Lys Lys Leu Asn Ala Lys Ile Asp  
                   35                  40                  45  
 Gln Glu Asn Gly Thr Val Val Val Glu Ser Ala Ser Asp Val Asp Arg  
                   50                  55                  60  
 Leu Arg Ala Leu Gln Asp Trp Ser Ala Ser Leu Arg Ser Leu Trp Gln  
 65                  70                  75                  80  
 Ala Thr Leu Ile Asp Gly Glu Gly Phe Lys Ser Asp Asp Pro Ala Gln  
                   85                  90                  95  
 Leu His Gly Met Arg Gly Gly Ser Met Leu Gln Ser Ala Phe Gly Asp  
                   100                  105                  110  
 Glu Ala Pro Thr Ala Gly Leu Arg Ala Ser Asn Phe Arg Val Arg Thr  
                   115                  120                  125  
 Gly Trp Lys Gly Lys Gly Gly Gln Gly Ser Lys Ala Gly Val Gly Ala  
                   130                  135                  140  
 Phe  
 145

<210> 43132  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<400> 43132  
 Phe Pro Asp Ser His Glu Thr Val Cys Gly Ser Cys Gly Leu Val Leu  
 1                  5                  10                  15  
 Ala Asp Arg Glu Ile Asp Met His Ser Glu Trp Arg Thr Phe Ser Asn  
                   20                  25                  30  
 Asp Asp His Asn Asn Asp Asp Pro Ser Arg Val Gly Tyr Ala Thr Asn  
                   35                  40                  45  
 Pro Leu Leu Asn Gly Asp Gln Leu Glu Thr His Ile Ala Ser Gly Gly  
                   50                  55                  60  
 Ser Gly Arg Ala Arg Gln Leu Tyr Arg Ala Gln Asn Lys Gln Ser Ser  
 65                  70                  75                  80  
 Asp Lys Ala Asn Lys Ala Leu Leu Ala Ala Tyr Asn Glu Ile Gly Ala  
                   85                  90                  95

## 19461

Leu Cys Asp Gly Phe Asn Ile Gln Asn Asn Val Pro Asp Thr Val Lys  
                   100                  105                  110  
 Phe Leu Phe Lys Ile Val Val His Ala Gln Ala Phe Lys  
                   115                  120                  125

<210> 43133  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 43133  
 Arg Ser His Glu Ile Leu Ile Gly Gly Cys Ile Phe Ile Ala Cys Arg  
 1                  5                  10                  15  
 Gln Cys Lys Ile Pro Arg Thr Phe Thr Glu Tyr Phe Asp Val Thr Lys  
                   20                  25                  30  
 Val Pro Pro Lys Glu Met Gly Met Ile Tyr Lys Ala Leu Glu Lys Phe  
                   35                  40                  45  
 Phe Thr Val Gln Lys Leu Glu Arg Asp Ser Cys Val Val Phe Tyr Trp  
                   50                  55                  60  
 Trp Cys Ser Arg Ile Pro Thr Arg Ala Tyr Leu Ala Asn Asn Phe Tyr  
 65                  70                  75                  80  
 Asn Pro Ser Leu Asn Phe Leu  
                   85

<210> 43134  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 43134  
 Ala Ala Asn Arg Ala Leu Phe Ala Leu Ser Leu Asp Cys Leu Phe Cys  
 1                  5                  10                  15  
 Ala Arg Tyr Asn Cys Arg Ala Arg Pro Glu Pro Pro Leu Ala Ile Trp  
                   20                  25                  30  
 Val Ser Ser Trp Ser Pro Phe Asn Arg Gly Phe Val Ala Tyr Pro Thr  
                   35                  40                  45  
 Arg Glu Gly Ser Ser Leu Leu Trp Ser Ser Leu Glu Asn Val Arg His  
                   50                  55                  60  
 Ser Glu Cys Met Ser Ile Ser Arg Ser Ala Ser Thr Arg Pro Gln Glu  
 65                  70                  75                  80  
 Pro Gln Thr Val Ser Cys Glu Ser Gly Asn  
                   85                  90

<210> 43135  
 <211> 184  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (79), (173)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43135  
 Val Leu Glu Phe Val Gln Arg Ala Arg Lys Ala Glu Val Ser Ala Val  
 1                  5                  10                  15

## 19462

Glu Ser Thr Arg Asp Phe Pro Glu Asp Arg Arg Leu Asn Arg Ile Leu  
                   20                  25                  30  
 Ala Ala Asp Ser Ile Val Leu Val Lys Asn Glu Ser Gly Leu Leu Pro  
                   35                  40                  45  
 Leu Asn Pro Gln Thr Leu Thr Ser Val Ala Met Ile Gly Pro Asn Met  
                   50                  55                  60  
 Lys Thr Ala Ala Phe Cys Gly Gly Gly Ser Ala Ser Leu Gln Xaa Tyr  
                   65                  70                  75                  80  
 Tyr Ser Thr Ser Pro Tyr Gln Gly Ile Thr Ser Gln Leu Pro Pro Gly  
                   85                  90                  95  
 Val Glu Val Leu Tyr Glu Thr Gly Ala Thr Ser Tyr Ala Phe Ile Pro  
                   100                  105                  110  
 Glu Leu Ala Ala Ser Glu Val Arg Thr Pro Glu Gly Gln Pro Gly Leu  
                   115                  120                  125  
 Gly Met Arg Phe Tyr Arg Asp Pro Pro Ser Val Gln Glu Arg Arg Val  
                   130                  135                  140  
 Val Glu Glu Thr Ile Ile Gln Glu Ser Ser Trp Gln Leu Met Gly Phe  
                   145                  150                  155                  160  
 Ser Asn Pro Glu Leu Asp Arg Leu Phe His Ala His Xaa Tyr Thr Thr  
                   165                  170                  175  
 Gly Leu Glu Ala Lys Arg Ala Gly  
                   180

&lt;210&gt; 43136

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (89)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43136

Glu Thr Met Ala Leu Asp Gly Glu Thr Asn Leu Lys Ser Lys Gln Pro  
 1                  5                  10                  15  
 Cys Gln Ser Val Ala Lys Val Cys Gly Thr Val Glu Asp Met Cys Ser  
                   20                  25                  30  
 Asn Ser Ile His Phe Ala Val Glu Asp Pro Asn Ile Asp Leu Tyr Lys  
                   35                  40                  45  
 Phe Asp Gly Asn Val Ile Val Asn Ala Asp Lys Leu Pro Leu Thr Asn  
                   50                  55                  60  
 Thr Glu Val Val Tyr Arg Gly Ser Ile Leu Arg Lys Ser Ser Pro Arg  
                   65                  70                  75                  80  
 Gly Trp Met Val Gln Ala Ala Ala Xaa Ile Arg  
                   85                  90

&lt;210&gt; 43137

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43137

Phe Thr Met Ile Asp Gln Pro Thr Tyr Tyr His Phe His Ile His Val  
 1                  5                  10                  15  
 Val Asn Val Met Leu Glu Ala Gly Ala Thr Gln Val Thr Gly Lys Ala

## 19463

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Phe | Gly | Leu | Glu | Asn | Leu | Ile | Ser | Gln | Phe | Glu | Thr | Leu | Gly | Arg | Asp |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Gln | Asp | Ala | Cys | Met | Thr | Gly | Leu | Thr | Thr | Ala | Glu | Arg | Ser | Ser | Ile |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |

<210> 43138  
 <211> 191  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43138 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Glu         | Thr | Met | Thr | Tyr | Thr | Asp | Gly | Thr | Trp | Arg | Ile | Gln | Ala | Gln | Ala |
| 1           |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Gln         | Gly | Gly | Gln | Gln | Phe | His | Asp | Leu | Lys | Leu | Asn | Leu | Ile | Trp | Pro |
|             | 20  |     | 25  |     |     |     |     | 30  |     |     |     |     |     |     |     |
| Cys         | Thr | Glu | Gln | His | Ile | Lys | Lys | Tyr | Ser | Asp | Gln | Gln | Leu | Arg | Met |
|             | 35  |     | 40  |     |     |     |     | 45  |     |     |     |     |     |     |     |
| Val         | Thr | Glu | Thr | Pro | Glu | Ile | Tyr | Arg | Asp | Tyr | Val | Arg | Pro | Tyr | Met |
|             | 50  |     | 55  |     |     |     |     | 60  |     |     |     |     |     |     |     |
| Ser         | Ala | Gln | Arg | Glu | Glu | Gly | Arg | Leu | Asn | Trp | Val | Phe | Asn | Ile | Leu |
| 65          |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |     |
| Glu         | Gly | Arg | Thr | Glu | Gln | Glu | Asp | Ile | Ile | Leu | Arg | Asp | Ala | Gly | Glu |
|             |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Gly         | Pro | Asp | Asp | Gly | Phe | Leu | Met | Leu | Pro | Asp | Leu | Asn | Trp | Asp | Arg |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Lys         | Thr | Met | Ser | Ser | Leu | His | Leu | Leu | Ala | Leu | Val | Gln | Arg | Arg | Asp |
|             | 115 |     |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Ile         | Trp | Ser | Leu | Arg | Asp | Leu | Lys | Lys | Lys | His | Ile | Pro | Trp | Leu | Arg |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr         | Leu | Arg | Gln | Arg | Leu | Leu | Glu | Gly | Thr | Val | Lys | Met | Tyr | Pro | Glu |
| 145         |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu         | Glu | Gln | Asp | Gln | Leu | Lys | Leu | Tyr | Val | His | Cys | Lys | Tyr | Tyr | Ser |
|             |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Leu         | Gly | Gly | Phe | Ala | Trp | Val | Asp | Gly | Met | Cys | Thr | Asp | Leu | Arg |     |
|             |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

<210> 43139  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43139 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ile         | Ser | Gly | Leu | Glu | Ala | Asp | Gln | Arg | Val | Leu | Ala | Ala | His | Gly | Val |
| 1           |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr         | Ala | Leu | Thr | Ala | Thr | Thr | Gly | Leu | Thr | Ala | Gln | Asn | Thr | Leu | Gly |
|             | 20  |     |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Val         | Gln | Asp | Ile | Phe | Ile | Val | Pro | Ala | Gln | Phe | Val | Lys | Lys | Gln | Ile |
|             | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asn         | Ala | Gly | Leu | Glu | Asp | Val | Gly | Ala | Asp | Gly | Leu | His | His | Gly | Leu |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg         | Gly | Ile | Ile | Ala | Trp | Ile |     |     |     |     |     |     |     |     |     |
| 65          |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

<210> 43140  
 <211> 268

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (10), (39), (267), (268)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43140

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Val | Leu | Asn | Val | Ser | Leu | Phe | Lys | Xaa | Pro | Asn | Pro | Pro | Ala | Arg |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Thr | Val | Ala | Cys | Gly | Asp | Glu | Leu | Pro | Glu | Gly | Val | Asn | Val | Met |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Ser | Phe | Ile | Val | Asp | Xaa | Gly | Asp | Arg | Asp | Ala | Arg | Gln | Gly | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| His | Val | Gln | Ser | Arg | Ser | Tyr | Trp | Ala | Pro | Ala | Asn | Ile | Gly | Pro | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Gln | Ala | Met | Ser | Ile | Pro | Leu | Arg | Gly | Ala | Glu | His | Ile | Val | Tyr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Ala | Gly | Gln | Ile | Pro | Leu | Glu | Pro | Ala | Phe | Met | Gln | Met | Val | Cys |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Ser | Ala | Pro | Thr | Glu | Glu | Arg | Ser | Trp | Leu | Ser | Asp | Tyr | Ser | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Ala | Val | Leu | Ser | Leu | Gln | His | Met | Trp | Arg | Ile | Gly | Val | Thr | Met |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| His | Val | Asp | Trp | Trp | Leu | Gly | Ala | Val | Ala | Phe | Ile | Thr | Gly | Ala | Glu |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Ile | Ala | Ala | Lys | Ala | Gln | Val | Ala | Trp | His | Ile | Trp | Glu | Thr | Met |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Arg | Lys | Arg | Asp | Asp | Glu | Ser | Ile | Asp | Glu | Glu | Glu | Ser | Ser | Phe |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asp | Val | Trp | Asp | Ile | Lys | Tyr | Gly | Arg | Arg | Thr | Glu | Glu | Gln | Thr | Pro |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Ala | Thr | Val | Ser | Ala | Ser | Ile | Pro | Asn | Phe | Glu | Val | Leu | Arg | Ser |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Gly | Val | Thr | Pro | Pro | Phe | Leu | Ala | Val | Gln | Val | Glu | Glu | Leu | Pro |
|     | 210 |     |     |     |     | 215 |     |     |     | 220 |     |     |     |     |     |
| Arg | Ala | Ser | Asp | Ile | Glu | Trp | Gln | Gly | Leu | Gly | Tyr | Arg | Cys | Asp | Gly |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Leu | Glu | Leu | Asn | Ala | Glu | Glu | Thr | Asp | Gln | Gly | Arg | Ile | Ser | Leu | His |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Ala | Pro | Gly | Leu | Glu | Gly | Asn | Ala | Leu | Arg | Xaa | Xaa |     |     |     |     |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     |     |     |     |

&lt;210&gt; 43141

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt;

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.



&lt;400&gt; 43141

```

Pro Arg Lys Gln Arg Lys Gln Pro Arg Arg Arg Lys Asn Pro Pro Glu
1          5          10          15
Gly Pro Pro Xaa Arg Arg Lys Xaa Gly Pro Arg Lys Arg Lys Arg Lys
20          25          30
Arg His Thr Xaa Gln Arg Xaa Asp Pro Gln Gly Lys Ala Arg Lys Lys
35          40          45
Gln Ser Gly Pro Gln Glu Thr Arg Asn Thr Gly Arg Lys Pro Gly Asn
50          55          60
Ala Glu Lys His Pro Thr Pro Lys Gly Arg Arg Gly Pro Xaa Pro Pro
65          70          75          80
Gln Glu Glu Gly Lys Asp Lys Pro Gln Pro Glu Ala Arg Arg Glu Ala
85          90          95
Xaa Asn Arg Asn Xaa Thr Xaa Lys Arg Arg Trp Xaa Gly Arg Gly Xaa
100          105          110
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
115          120          125
Xaa His Pro Gln Thr His His His Pro Gln Tyr Leu Pro Pro Pro
130          135          140
Ser Pro Ile Gln His Lys Val Arg Pro His Arg Leu Thr Ser Lys Leu
145          150          155          160
Leu Arg Pro Thr Arg Trp Arg Leu
165

```

&lt;210&gt; 43142

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt;

(20), (23), (36), (39), (78), (97), (100), (101), (103), (107), (111), (112), (113), (114), (115), (116), (118), (119), (120), (121), (122), (123), (124), (125), (126), (127), (128)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43142

```

Gln Glu Asn Arg Gly Ser Ser Gln Glu Gly Gly Lys Thr Pro Pro Arg
1          5          10          15
Asp Pro His Xaa Gly Gly Xaa Glu Gly Pro Gly Asn Gly Arg Gly Lys
20          25          30
Asp Thr Arg Xaa Asn Glu Xaa Thr His Arg Gly Arg Gln Glu Lys Asn
35          40          45
Lys Ala Ala Pro Lys Lys Pro Glu Thr Arg Gly Gly Asn Gln Ala Thr
50          55          60
Gln Arg Asn Thr Pro His Pro Lys Glu Glu Glu Gly Pro Xaa Pro His
65          70          75          80
Arg Arg Arg Gly Lys Thr Asn Pro Asn Pro Lys Gln Asp Gly Arg Pro
85          90          95
Xaa Thr Glu Xaa Xaa Gln Xaa Asn Asp Val Xaa Arg Gly Gly Xaa Xaa
100          105          110
Xaa Xaa Xaa Xaa Glu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
115          120          125
Thr Thr Pro Lys Pro Thr Ile Thr Ile Leu Asn Thr Ser Leu Arg Gln
130          135          140
Val Pro Ser Ser Thr Lys Phe Asp Leu Ile Val Ser Pro Ala Asn Ser

```

## 19466

|   |                     |                         |  |     |  |     |
|---|---------------------|-------------------------|--|-----|--|-----|
| 145   |                     | 150                     |  | 155 |  | 160 |
| Tyr Gly Arg Leu Asp   | Gly Ala Phe Asp Asp | Ala Ile Ser Arg Val Phe |  |     |  |     |
|   | 165                 | 170                     |  |     |  |     |
| Cys Gln Pro Pro Lys His Glu Tyr Asn Thr Leu Thr Glu Ala Thr Gln |                     |                         |  |     |  |     |
|   | 180                 | 185                     |  |     |  |     |
| Lys Val Leu Tyr Lys Gln Trp Arg Gly Phe Ala Pro Pro Gly Thr Cys |                     |                         |  |     |  |     |
|   | 195                 | 200                     |  |     |  |     |
| Thr Leu Val Pro Phe Pro Asp Glu Leu Ile Gly Glu Asn Glu Trp Gly |                     |                         |  |     |  |     |
|   | 210                 | 215                     |  |     |  |     |
| Cys Arg Trp Val Ala Ile Cys Pro Thr Met Arg Tyr Pro Asp Arg Val |                     |                         |  |     |  |     |
| 225   | 230                 | 235                     |  |     |  |     |
| Thr Trp Asp Arg Glu Ile Val Tyr Glu Cys Val Trp Ser Leu Leu Cys |                     |                         |  |     |  |     |
|   | 245                 | 250                     |  |     |  |     |
| Gln Val Glu Gly Trp Asn Arg Gly Cys Lys Lys Glu Lys Arg Ile Glu |                     |                         |  |     |  |     |
|   | 260                 | 265                     |  |     |  |     |
| Ser Ile Leu Ile Thr Pro Leu Ala Thr Gly Val Gly Lys Val Ser Ala |                     |                         |  |     |  |     |
|   | 275                 | 280                     |  |     |  |     |
| Ala Lys Trp Ala Ala Gln Phe Val Leu Ala Met Arg His Phe Val Phe |                     |                         |  |     |  |     |
|   | 290                 | 295                     |  |     |  |     |
| Thr His Arg Gly Trp Lys Asp Thr Arg Ser Gly                     |                     |                         |  |     |  |     |
| 305   | 310                 | 315                     |  |     |  |     |

&lt;210&gt; 43143

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (29), (230), (232), (238), (239)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43143

|   |     |     |     |
|---|-----|-----|-----|
| Cys Gly Thr Leu Asn Gln Tyr Tyr Phe Gly Glu Ala Phe Asp Glu Gln |     |     |     |
| 1   | 5   | 10  | 15  |
| Arg Val Thr Gly Ala Glu Ile Glu Arg Gly Val Ile Xaa Leu Tyr Ser |     |     |     |
|   | 20  | 25  | 30  |
| Asn Leu Val Arg Phe Gly Tyr Phe Asp Gly Asn Glu Ser Val Tyr Arg |     |     |     |
|   | 35  | 40  | 45  |
| Asp Leu Thr Trp Asn Asp Val Val Thr Thr Asp Ala Trp Asn Ile Ser |     |     |     |
|   | 50  | 55  | 60  |
| Tyr Glu Ala Ala Val Glu Gly Ile Val Leu Leu Lys Asn Asp Gly Thr |     |     |     |
| 65  | 70  | 75  | 80  |
| Leu Pro Leu Ala Lys Ser Val Arg Ser Val Ala Leu Ile Gly Pro Trp |     |     |     |
|   | 85  | 90  | 95  |
| Met Asn Val Thr Thr Gln Leu Gln Gly Asn Tyr Phe Gly Pro Ala Pro |     |     |     |
|   | 100 | 105 | 110 |
| Tyr Leu Ile Ser Pro Leu Asn Ala Phe Gln Asn Ser Asp Leu Asp Val |     |     |     |
|   | 115 | 120 | 125 |
| Asn Tyr Ala Phe Gly Thr Asn Ile Ser Ser His Ser Thr Asp Gly Phe |     |     |     |
|   | 130 | 135 | 140 |
| Ser Glu Ala Leu Ser Ala Ala Lys Lys Ser Asp Val Ile Ile Phe Ala |     |     |     |
| 145   | 150 | 155 | 160 |
| Gly Gly Ile Asp Asn Thr Leu Glu Ala Glu Ala Met Asp Arg Met Asn |     |     |     |
|   | 165 | 170 | 175 |
| Ile Thr Trp Pro Gly Asn Gln Leu Gln Leu Ile Asp Gln Leu Ser Gln |     |     |     |

```
<210> 43144
<211> 83
<212> PRT
<213> A.fumigatus
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<210> 43145
<211> 60
<212> PRT
<213> A.fumigatus
```

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<210> 43146
<211> 60
<212> PRT
<213> A.fumigatus
```

```

<400> 43146
Ala Gly Val Cys His Leu Asn Ser Asn Asp Tyr Ser Cys Thr Ser Ala
1          5          10          15
Ala Ala Gly Leu Pro Lys Ile Met Tyr Tyr Cys Arg Phe Arg Leu Ile
20          25          30
Ala Pro Leu Phe Thr Cys Gly Phe Gln Asn Asp Gln Pro Ala Ala Ala
35          40          45

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## 19468

Pro Ser His Ser Pro Gly Val Val Tyr Pro Gln Met  
 50 55 60

<210> 43147  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 43147  
 Val Pro Arg Gly Ile Tyr Gln His Ser Asn Ala Ser Leu Thr Leu Val  
 1 5 10 15  
 Ser Thr Met His Val Arg Ile Leu Arg Gly Gly Cys Glu Val Glu Gln  
 20 25 30  
 Trp Asn Cys Val Thr Ser Gly Gly Lys Arg Pro Leu Gly Cys Asp Ser  
 35 40 45  
 Glu Gln Pro Gln Val Asp His Ser Gly Asn His Arg  
 50 55 60

<210> 43148  
 <211> 104  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (70),(95)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43148  
 Glu Leu Arg Lys Thr Thr Leu Arg Leu Pro Ser Val Val Ile Pro His  
 1 5 10 15  
 Gln Pro Asp Thr Met Glu Ser Gly Ser Glu Glu Glu Ile Asp Ile Gln  
 20 25 30  
 Tyr Thr Asp Trp Glu Ser Glu Thr Asp Pro Thr Ala Ser Glu Ser Asp  
 35 40 45  
 Glu Ala Phe Ile Val Tyr Asp Asp Glu Pro Ile Glu Met Glu Asp Tyr  
 50 55 60  
 Asp Ser Ser Tyr Val Xaa Thr Glu Ser Glu Glu Ile Ala Leu Val His  
 65 70 75 80  
 Tyr Arg Leu Arg Leu Trp Arg Asn Ile Gln Arg Ser Lys Met Xaa Leu  
 85 90 95  
 Pro Arg Arg Leu Ala Ser Tyr Leu  
 100

<210> 43149  
 <211> 254  
 <212> PRT  
 <213> A.fumigatus

<400> 43149  
 Gly Arg Val Ile Ser Thr Pro Arg Glu Asp Tyr Asp Val Ser Met Lys  
 1 5 10 15  
 Tyr Gly Val Arg Ala Thr Pro Thr Phe Met Thr Phe Leu Lys Gly Lys  
 20 25 30  
 Lys Leu Asp Glu Trp Ser Gly Ala Asp Pro Ala Lys Leu Arg Gly Asn  
 35 40 45

## 19469

```

Val Arg Leu Leu Ile Glu Met Ala His Pro Thr His Arg His Arg Gln
 50          55          60
Leu His Leu Pro Ser Phe Gln Arg His Leu Ser Asn Phe Val Met Tyr
65          70          75          80
Lys Lys Val Pro Pro Leu Asp Lys Val Val Gln Arg Leu Gln Pro His
          85          90          95
His Glu Asp Pro Arg Leu Lys Ser Met Ile Ala Phe Ile Thr Ala Arg
          100          105          110
Ser Ser Ser Thr Thr Pro Thr Ser Pro Ala Ala Asp Val Ala Leu Pro
          115          120          125
Glu Ala Leu Pro Thr Phe Ala Ser Tyr Leu Gln Ser Thr Phe His Ala
          130          135          140
Leu Pro Pro Glu Asn Gln Phe Ala Leu Val Asp Leu Ala Arg Leu Leu
145          150          155          160
Phe Leu Asp Thr Arg Val Ser Ser Phe Phe Ala Glu Gln Pro Asn His
          165          170          175
Thr Thr Leu Leu Asn Leu Leu Ser Pro Ser Thr Lys Leu Ser Ser Cys
          180          185          190
Pro Tyr Asn Leu Arg Ile Val Met Leu Gln Leu Ile Cys Asn Leu Phe
          195          200          205
Ser Ser Pro Leu Tyr Leu Asp His Leu Thr Thr Asn Thr Ala Asn Lys
          210          215          220
Asn Lys Leu His Thr Thr Val Leu Asn Leu Ala Thr Ser Ser Leu Leu
225          230          235          240
Glu Pro His Pro Asn Leu Arg Thr Val Ala Ala Ser Leu Thr
          245          250

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&lt;210&gt; 43150

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (15)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43150

```

Asp Arg Ser Ala Ser Leu Glu Pro Cys Leu Asp Gly Phe Thr Xaa Arg
1          5          10          15
Asp Phe Leu Ser Gly Leu Glu Arg Thr Val Gln Arg Asn Glu Thr Thr
          20          25          30
Leu Thr Glu Tyr Asn Arg Ile Arg Pro Asp Pro Pro Met Ile Glu Ala
          35          40          45
Ser Asn Glu Asn Ala Pro Leu Thr Arg Lys Glu Met Ser Arg Gln Val
          50          55          60
Gln Thr Leu Leu Thr Pro Glu Thr Thr Leu Phe Val Asp Thr Gly Asp
65          70          75          80
Ser Trp Phe Asn Gly Ile Lys Met Arg Leu Pro His Gly Thr Lys Phe
          85          90          95
Glu Ile Glu Met Gln Trp Gly His Ile Gly Trp Ser Ile Pro Ala Ser
          100          105          110
Cys Gly Tyr Thr Val Ala Glu Ser Gln Arg Gln Val Val Val Met Val
          115          120          125
Gly Asp Gly Ala Phe Gln Met Thr Ala Gln Glu Val Ser Gln Met Ile
130          135          140

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## 19470

Arg Tyr Lys Thr Pro Val Ile Ile Ile Leu Val Asn Asn Gln Gly Tyr  
 145 150 155 160  
 Thr Ile Glu Val Glu Ile His Asn Gly Ile Tyr Asn Gln Ile  
 165 170

<210> 43151

<211> 102

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (5), (7), (26)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43151

Gln Phe Val Arg Xaa Asn Xaa Arg His Glu Glu Ala Lys Met Val Leu  
 1 5 10 15  
 Asp Glu Leu Ser Ser Asp Leu Glu Ser Xaa Gly Ile His Ser Gln Ala  
 20 25 30  
 Met Ala Asp Arg Ala Thr Ser Leu Arg Ala Gln Ala Arg Ala Gln Gly  
 35 40 45  
 Leu Ile Gly Met Glu Arg Ser Leu Ser Met Leu Ile Trp Asn Tyr Tyr  
 50 55 60  
 Leu Ala Ser Val Asp Gln His Ser Ser Glu Ala Val Thr Leu Ala Glu  
 65 70 75 80  
 Asp Leu Ala Asp Glu Leu Met Ser Thr His Thr Thr Val Asp Ser Leu  
 85 90 95  
 Ala Gly Leu Ser Pro Glu  
 100

<210> 43152

<211> 162

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (153), (154), (155), (156), (158), (159)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43152

Arg Ile Tyr Ile His Ser Leu Met Asp Ser Ile Ala Ser Ser Gly Ser  
 1 5 10 15  
 Gly Arg His Ser Thr Ser Val Leu Arg Leu Cys His Asp Leu Cys Thr  
 20 25 30  
 Leu His Gly Arg Glu Gly Gln Trp Lys Gln Gly Ser Asp Cys Ala Trp  
 35 40 45  
 Ser Val Leu Lys His Val Trp Pro Asp Val His Asn Pro Thr Ser Glu  
 50 55 60  
 Ala Lys Phe Arg Ser Asp Arg Ala Pro Leu Ile Ala Asn Ile Val Leu  
 65 70 75 80  
 Asp Tyr Ala Tyr Cys Leu Phe Arg Arg Leu Asp Val Ala Asn Ala Thr  
 85 90 95  
 Thr Val Tyr Gly Asn Ala Phe Lys Ala Ser Ile Thr Ala Glu Lys Val  
 100 105 110

## 19471

Thr Val Pro His Leu Thr Ala Val Val Lys Thr Val Val Glu Phe Tyr  
 115 120 125  
 Glu Thr Thr Phe Gln Phe Ser Lys Ala Leu Val Leu Leu Arg Leu His  
 130 135 140  
 His Gly Cys Lys Asp Val Gln Lys Xaa Xaa Xaa Xaa Lys Xaa Xaa Arg  
 145 150 155 160  
 Trp Gly

&lt;210&gt; 43153

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43153

Trp Pro Leu Gln Arg Leu Leu Glu Pro Arg Gly Glu Asp Ala Gly Lys  
 1 5 10 15  
 Tyr Gly Glu Asp Ser Lys Leu Ile Tyr Asp Leu Gln Asp Gln Gly Gly  
 20 25 30  
 Glu Leu Cys Ser Leu Arg Tyr Asp Leu Thr Val Pro Phe Ala Arg Trp  
 35 40 45  
 Leu Ala Met Asn Pro Asp Val Arg Ser Ile Lys Arg Tyr His Ile Ala  
 50 55 60  
 Lys Val Tyr Arg Arg Asp Gln Pro Ala Val Ser Lys Gly Arg Met Arg  
 65 70 75 80  
 Glu Phe Tyr Gln Cys Asp Phe Asp Ile Ala Gly Ala Phe Asp Pro Met  
 85 90 95  
 Val Ser Asp Ala Glu Val Leu Arg Ile Val Thr Glu Val Phe Glu Glu  
 100 105 110  
 Leu Gly Trp Gln Gly Arg Tyr Thr Ile Lys Val Asn His Arg Lys Ile  
 115 120 125  
 Leu Asp Gly Val Phe Glu Val Cys Gly Val Pro Pro Glu Lys Ile Arg  
 130 135 140  
 Pro Ile Ser Ser Ala Val Asp Lys Leu Asp Lys Met Ser Trp Ala Asp  
 145 150 155 160  
 Val Arg Lys Glu Met Val Glu Glu Lys Gly Leu His Gly Glu Val Ala  
 165 170 175  
 Asp Lys Ile Glu Lys Tyr Val Ala Gly Lys Gly Ala Arg Asp Leu Leu  
 180 185 190  
 Glu Ser Leu Trp Lys Asp Glu Ser Leu Thr Ala  
 195 200

&lt;210&gt; 43154

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43154

Gln Cys Arg Ile Thr Thr Glu Asp Pro Ala Asn Gly Phe Arg Pro Asp  
 1 5 10 15  
 Thr Gly Lys Ile Glu Val Tyr Arg Ser Ala Gly Gly Asn Gly Val Arg  
 20 25 30  
 Leu Asp Gly Gly Asn Gly Phe Ala Gly Ala Ile Ile Ser Pro His Tyr  
 35 40 45  
 Asp Ser Met Leu Val Lys Cys Thr Cys Arg Gly Ser Thr Tyr Glu Ile  
 50 55 60

## 19472

Ala Arg Arg Lys Val Val Arg Ala Leu Val Glu Phe Arg Ile Arg Gly  
 65 70 75 80  
 Val Lys Thr Asn Ile Pro Phe Leu Thr Ser Leu Leu Ser His Pro Thr  
 85 90 95  
 Phe Ile Asp Gly Thr Cys Trp Thr Thr Phe Ile Asp Asp Thr Pro Glu  
 100 105 110  
 Leu Phe Ala Leu Ile Gly Ser Gln Asn Arg Ala Gln Lys Leu Leu Ala  
 115 120 125  
 Tyr Leu Gly Asp Val Ala Val Asn Gly Ser Ser Ile Lys Gly Gln Ile  
 130 135 140  
 Gly Glu Pro Lys Leu Lys Gly Glu Ile Ile Lys Pro Thr Leu Leu Asp  
 145 150 155 160  
 Asp Ala Gly Lys Pro Ile Asp Leu Ser Val Pro Leu Leu Ser Tyr Thr  
 165 170 175  
 Arg Arg Glu Ala Lys Asp His Ala  
 180

&lt;210&gt; 43155

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43155

Asn Ser Thr Leu Pro Thr Arg Lys Gln Lys Ile Ala Gly Ile Gln Ser  
 1 5 10 15  
 Met Thr Ala Val Ile Glu Gly Ile Thr Pro Gly Ser Gly Ala Tyr Ser  
 20 25 30  
 Asn Glu Ala Asn Pro Phe Thr Ile Asn Trp Arg Glu Ala Trp Trp Gly  
 35 40 45  
 Glu Asn Tyr Glu Arg Leu Leu Arg Val Lys Asn Lys Tyr Asp Pro Arg  
 50 55 60  
 Gly Leu Leu Lys Cys Trp Lys Cys Val Gly Trp Glu Glu Ser Asp Ala  
 65 70 75 80  
 Ala Thr Ser Pro Phe Ala Ala Phe Val  
 85

&lt;210&gt; 43156

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43156

Thr Met Met Leu Asp Gly Val Pro Gln Pro Pro Glu Pro Ile Glu Ala  
 1 5 10 15  
 Lys Gln Asn Asp Gln Glu Lys Ala Leu Asp Asp Gly Ala Asp Leu Lys  
 20 25 30  
 Pro Ile Asp Asn Thr Pro Tyr Ile Asp Pro Phe Gly Asp Glu Gln Asn  
 35 40 45  
 Ala Glu Val Lys Tyr Lys Thr Leu Lys Trp Trp Tyr Val Leu Arg Ser  
 50 55 60  
 Arg Ser Ile Tyr Asp Lys Gly Val Asp Ser  
 65 70

&lt;210&gt; 43157

&lt;211&gt; 67

&lt;212&gt; PRT



<213> A.fumigatus

<220>

<221> UNSURE

<222> (26)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43157

```

Gly Pro Cys Pro Asp Asn Ile Thr Gly Lys Asp Ile Gly His Leu Ser
1          5          10          15
Trp Ile Cys Met Ser Ala Leu Met Ala Xaa Glu Cys Gln Ala Arg Asn
          20          25          30
Ala Leu Phe Ile Pro Ile Gly Tyr Met Ala Pro Thr Gly Ile Ser Ile
          35          40          45
Thr Ser Ala Cys Ala Cys His Thr Arg Asn Ala Asn Ala Asn Ala Asn
          50          55          60
Ala Leu Val
65

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<210> 43158

<211> 201

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (20), (23), (28), (39)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43158

```

Ser Pro Val Leu Leu Pro Lys Pro Val Asp Trp Leu Thr Asn Ile Asp
1          5          10          15
Val Trp Gly Xaa Ser Met Xaa Pro Gly Ala Ser Xaa Tyr Thr Pro Pro
          20          25          30
Asp Asp Val Val Lys Phe Xaa Gln Asp Gly Pro Pro Pro Ile Tyr Val
          35          40          45
Gly Phe Gly Ser Ile Val Val Asp Asn Pro Thr Lys Leu Thr Arg Ile
          50          55          60
Val Phe Glu Ala Ile Val Lys Thr Gly Gln Arg Ala Phe Val Asn Lys
          65          70          75          80
Gly Trp Gly Asn Ile Gly Ala Gly Glu Ala Glu Ile Pro Gln Asn Val
          85          90          95
Phe Met Val Gly Ser Cys Pro His Asp Trp Leu Phe Gln Tyr Val Ser
          100          105          110
Cys Val Val His His Gly Gly Ala Gly Thr Thr Ala Ala Gly Leu Ala
          115          120          125
Leu Gly Arg Pro Thr Ile Ile Ile Pro Phe Phe Gly Asp Gln Pro Phe
          130          135          140
Trp Gly Ser Ile Val Tyr Arg Ala Gly Ala Gly Pro Ala Pro Ile Pro
          145          150          155          160
Tyr Lys Gln Leu Asn Ala Glu Lys Leu Ala Asp Ala Ile Asp Lys Ala
          165          170          175
Leu Gly Pro Glu Met Gln Glu Lys Ala Gly Glu Ile Gly Ala Thr Met
          180          185          190
Val Phe Thr Thr Gly Gly Asn Pro Arg
          195          200

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<210> 43159  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

<400> 43159  
 Pro Arg Ala Ile Trp Ala Arg Ser Leu Asp Phe Thr Gln Ala Thr Ser  
 1 5 10 15  
 Phe Pro Pro Ile Thr Ser Gly Pro Ala Ser Gly Thr Val Leu Pro Cys  
 20 25 30  
 Leu Pro Lys Ala Pro His Thr Pro Ala Ala Tyr Pro Pro Arg Pro Leu  
 35 40 45  
 Gly Ser Glu Asn Glu Ser Leu Lys Gly Met Gly Phe Pro Pro Arg Pro  
 50 55 60  
 Pro Asn Leu Ser Glu Ala Glu Arg Ile Ala Pro Gly Pro Gln Ala Pro  
 65 70 75 80  
 Lys Lys Ala

<210> 43160  
 <211> 152  
 <212> PRT  
 <213> A.fumigatus

<400> 43160  
 Tyr Gln Asn His Leu Thr Ser Tyr Leu Arg Asp Gln Ile Cys Gly Val  
 1 5 10 15  
 Lys Gly Ala Leu Ala Cys Ala Ser Tyr Thr Ala Ala Thr Ile Trp Pro  
 20 25 30  
 Tyr Lys Leu Ile Met His Leu Leu Val Ser Leu Leu Ala Ser Gly Lys  
 35 40 45  
 Val Asn Leu Gln Thr His Thr Pro Ala Thr Ala Val Thr Pro Ser Ala  
 50 55 60  
 Asp Gly Lys Phe Thr Ile Asp Thr Pro Arg Gly Ser Leu His Ala Asn  
 65 70 75 80  
 Lys Val Ile His Thr Ser Asn Ala Tyr Val Ser Ser Leu Leu Pro Gln  
 85 90 95  
 Tyr Lys His Asn Ile Ile Pro Cys Lys Gly Ile Cys Cys Arg Ile Thr  
 100 105 110  
 Val Pro Glu Gly Gln Thr Ala Pro Leu Leu Thr Asn Ser Tyr Ile Asp  
 115 120 125  
 Arg Thr Lys Asp Asn Val Leu Ser Tyr Leu Ile Pro Arg Ala Asp Gly  
 130 135 140  
 Ser Ile Ile Val Gly Gly Ala Ser  
 145 150

<210> 43161  
 <211> 98  
 <212> PRT  
 <213> A.fumigatus

<400> 43161  
 Gly Ser Lys His Asn Lys Ala Ile Ile Leu Ser Ser Ile Pro His Pro  
 1 5 10 15  
 Tyr Pro His Gln Gln His Ile Pro Val Asn Asn Lys Thr Glu Asn His

## 19475

20 25 30  
 Pro Val Arg Phe Ala Met Arg His Pro Ala His Glu Ser Ile Gln Ser  
 35 40 45  
 Asp Ser Thr Pro Leu Leu Ser Ala Gln Arg Met Cys Gln Gly Leu Ala  
 50 55 60  
 Val Cys Tyr Leu Arg Arg Lys Leu Ile Val Val Ser Leu Leu Leu Ser  
 65 70 75 80  
 Ser Cys Ser His Leu Ile Leu Ser Tyr Thr Asp Gly Asp Gly Arg Thr  
 85 90 95  
 Arg Asp

<210> 43162  
 <211> 158  
 <212> PRT  
 <213> A.fumigatus

<400> 43162  
 Ala Gly Val Ser Leu Glu Ala Asp Ser Tyr Lys Ala Asp Ala Ser Leu  
 1 5 10 15  
 Ser Glu Gln Gly Glu Asp Tyr Ala Lys Lys Met Thr Glu Arg Leu Leu  
 20 25 30  
 Gln His Arg Glu Ser Glu Lys Gln Ala Met Ile Asp Arg Gly Glu Thr  
 35 40 45  
 Asp Tyr Glu Leu Lys Pro Leu Thr Val Trp Thr Ser Thr Arg Arg Arg  
 50 55 60  
 Thr Val Glu Thr Ala Lys Tyr Leu Tyr Glu Lys Gly Tyr Lys Val Arg  
 65 70 75 80  
 Gln Arg Ser Gln Met Ser Gln Leu Asn Pro Gly Val Cys Glu Lys Met  
 85 90 95  
 Ser Glu Arg Arg Ile Arg Glu Glu Tyr Pro Asp Glu Val Ala Lys His  
 100 105 110  
 Glu Leu Asp Pro Tyr His His Arg Tyr Pro Arg Ala Glu Val Ser Leu  
 115 120 125  
 Ile Ser Ala Ser Asn Leu Thr Thr Thr Arg Ala Tyr His Tyr Asp  
 130 135 140  
 Ser Pro Thr Met Thr Leu Arg Cys Asp Leu Asn Pro Ser Phe  
 145 150 155

<210> 43163  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (2), (31)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43163  
 Pro Xaa Asn Pro Lys Val Leu Arg Tyr Leu Arg Gly Ala Val Ser Trp  
 1 5 10 15  
 Asp Gln Asn Trp Asp His Met Arg Ser Glu Gly Glu Thr Thr Xaa Leu  
 20 25 30  
 Ala Ser Phe Thr Leu Thr Thr Gly Thr Arg Leu Lys Asn Leu Ala Arg  
 35 40 45

## 19476

Ala Gly Met Pro Trp Cys His Pro Arg Ala Lys Ser Ala Pro Val Gly  
 50 55 60  
 Tyr Phe Gly Ala Pro Leu  
 65 70

<210> 43164  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 43164  
 Gln Phe Ala Cys Thr Pro Glu Gly Tyr Ile Met Arg Glu Cys Ile Thr  
 1 5 10 15  
 Asn Asp Ala Arg Ile Ala Glu Pro Leu Val Gly Gln Ser Leu Ile Met  
 20 25 30  
 Ser Ala Met Arg Lys Glu Trp His Thr Gly Ser Lys Asn Gly Met Glu  
 35 40 45  
 Ser Ser Pro Arg Gly Ser Lys Val Arg Arg Tyr Ala Tyr Ser Asn  
 50 55 60

<210> 43165  
 <211> 281  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (26), (34), (49), (60), (80), (93)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43165  
 Gly Asn His Leu Leu Gly Pro Lys Ala Ser Phe Pro Met Ala Glu Pro  
 1 5 10 15  
 Asn Gln Phe Pro Phe Leu Ser Pro Arg Xaa Gln Ser Pro Glu Thr Pro  
 20 25 30  
 Pro Xaa Ala Thr Ser Pro Ser Phe His Thr Pro Ser Pro Ala Ala Pro  
 35 40 45  
 Xaa Ile Met Lys Thr Gly Thr Ala Lys Gly Ser Xaa Asn Ala Ile Leu  
 50 55 60  
 Glu His Leu Gly Tyr Thr Pro Glu Leu Ser Arg Asn Arg Ser Val Xaa  
 65 70 75 80  
 Gln Val Ala Phe Met Cys Phe Ile Leu Ser Ser Val Xaa Tyr Gly Leu  
 85 90 95  
 Ala Thr Thr Phe Phe Tyr Pro Leu Ala Ala Glu Gly Pro Ser Thr Ile  
 100 105 110  
 Val Trp Gly Trp Ile Ile Val Ser Leu Val Ile Leu Cys Val Ala Ile  
 115 120 125  
 Ser Leu Ala Glu Ile Thr Ser Val Tyr Pro Thr Ala Gly Gly Val Tyr  
 130 135 140  
 Tyr Gln Thr Phe Ala Leu Ser Pro Pro Trp Cys Arg Arg Ala Ala Ala  
 145 150 155 160  
 Trp Ile Cys Gly Trp Ala Tyr Val Leu Gly Asn Ile Thr Ile Thr Leu  
 165 170 175  
 Ala Val Asn Phe Gly Thr Thr Leu Phe Phe Val Ala Cys Leu Asn Val  
 180 185 190  
 Phe Glu Ser Glu Pro Gly Val Gly Ile Val Asp Asp Met Gln Thr Tyr

## 19477

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      195              200              205
Gln Ile Tyr Leu Ile Phe Leu Ala Ile Thr Leu Leu Thr His Ala Ile
  210              215              220
Ser Ser Leu Gly Asn Lys Trp Leu Pro Ser Leu Glu Val Cys Phe Phe
225              230              235              240
Ser Phe Leu Phe Phe Phe Leu Phe Ile Phe Gln Cys Phe Pro Ser Val
      245              250              255
Ala Thr Arg Val Ser Trp Leu Pro Met Arg Leu Leu Met Arg Phe Val
      260              265              270
Ser Pro Tyr Arg Phe Arg Pro Ser Ser
      275              280

```

<210> 43166  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43166
Arg Asn Gly Leu Asn Gln Ile Val Val Ile Arg Leu Thr Gln Gly Glu
  1              5              10              15
Met Ser Ser Gly Val Thr His Thr Leu Ser Thr Leu Asn Pro Glu Thr
      20              25              30
Cys Pro Glu Asp Lys Ala Thr Ala Leu Pro Val Ser Arg Cys Arg Gln
      35              40              45
Ile Val Phe Thr Tyr Arg Ser Arg Gly Thr Ala His Ala Met
      50              55              60

```

<210> 43167  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43167
Ile Lys Leu Leu Ile Gly Asp Ser Gly Val Gly Lys Ser Cys Cys
  1              5              10              15
Leu Leu Arg Phe Ser Glu Asp Ser Phe Thr Pro Ser Phe Ile Thr Thr
      20              25              30
Ile Gly Ile Asp Phe Lys Ile Arg Thr Ile Glu Leu Asp Gly Glu Arg
      35              40              45
Val Lys Leu Gln Ile Trp Asp Thr Ala Cys Gln Glu Arg Phe Arg
      50              55              60

```

<210> 43168  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (17)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 43168
Pro Phe Trp Thr Arg Tyr Phe Pro Ala Pro Gly Arg Val Asp Arg Leu
  1              5              10              15
Xaa Lys Val Lys His Ile Ile Trp Leu Glu Lys His Leu Arg Ser Met

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## 19478

20 25 30  
 Cys Arg Glu Arg Ser Lys Gly Leu Pro Leu Gln Tyr Ile Leu Gly Asp  
 35 40 45  
 Gln Pro Phe Gly Asp Leu Glu Ile Leu Cys Glu Arg Gly Val Leu Ile  
 50 55 60  
 Pro Arg  
 65

&lt;210&gt; 43169

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (54), (56)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43169

Phe Ala Thr Asn Leu Thr Ala Asp Ala Ala Ser Ala Tyr Thr Leu Leu  
 1 5 10 15  
 Ser Trp Ile Gly Asp Thr Ser Trp Leu Asp Met Thr Ala Tyr Asn Tyr  
 20 25 30  
 Val Pro Ser Tyr Ser Leu Thr Gly Pro Ser Thr Ser Thr Asn Ser Ser  
 35 40 45  
 Thr Thr Thr Pro Ala Xaa Thr Xaa Thr Pro Ser Ala Thr Ala Thr Ala  
 50 55 60  
 Thr Trp Gly His Pro Thr Ser Gly Thr Thr Pro Pro Ala Gly Ala Val  
 65 70 75 80  
 Ile Val Ser Gln Gly Gly Ser Val Asn Trp Ser Tyr Ser Asn Leu Thr  
 85 90 95  
 Asp Ala Leu Ala Ala Leu Pro Asn Asp Ala Ser Thr Gln Ile Ile Phe  
 100 105 110  
 Ile Tyr Pro Asp Thr Tyr Thr Glu Gln Val Pro Ser Ile Asn Arg Lys  
 115 120 125  
 Gly Pro Val Gln Ile Ile Gly Tyr Gln Ser Gly Asn Pro Gly Lys Thr  
 130 135 140  
 Tyr Arg Thr Asn Gln Val Thr Ile Thr Phe Ala Arg Gly Leu Ser Val  
 145 150 155 160  
 Ser Pro Leu Pro Thr Gly His Ser Asp Ala Glu Thr Ala Thr Leu Ser  
 165 170 175  
 Thr Ser Tyr Thr Pro Gly Gly Gly Arg Asn Ala Val  
 180 185

&lt;210&gt; 43170

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43170

Ser Pro Leu Cys Pro Pro Leu Tyr Leu Phe Leu Val Thr Ile Ser Ala  
 1 5 10 15  
 Tyr Pro Lys Leu Ala Ala Ser Tyr Leu Ser Leu Phe Pro Gly Asp Ile  
 20 25 30  
 Pro Leu Leu Gly Val Asp His Leu Val Ala Asp Pro Ile Phe Phe Leu  
 35 40 45

## 19479

Pro Leu Leu Pro Thr Thr Arg Leu Leu His Leu Arg Ile Ile Cys Leu  
 50 55 60  
 Phe Ile Phe Arg Arg Phe  
 65 70

<210> 43171  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 43171  
 Thr Cys Tyr Phe Pro Ala Ala Val Val Lys Ile Ser Leu Val Asn Phe  
 1 5 10 15  
 Cys Ser Leu Leu Pro Ser Phe Arg Pro Pro Ser Phe Pro Leu Pro Leu  
 20 25 30  
 Ser Arg Ala Ile Arg Val Thr Ala Asp Ser Leu Gln Leu Leu Val  
 35 40 45  
 Asp Ser Cys Pro Gln Leu Thr Tyr Thr Pro Leu Pro Pro His Ile Ser  
 50 55 60  
 Leu Gly Leu Trp Leu Cys Tyr Ile Tyr Lys Leu Leu Asn Pro Thr Arg  
 65 70 75 80  
 Leu Asp Gly Leu Leu Ser  
 85

<210> 43172  
 <211> 195  
 <212> PRT  
 <213> A.fumigatus

<400> 43172  
 Gln Gln Gln Glu Glu Lys Ser Arg Asn Ile Leu Pro Lys Ser Ser  
 1 5 10 15  
 Ser Ser Ser Ser Val Asp Asn Pro Arg Lys Gln Thr Glu Lys Ile Ala  
 20 25 30  
 Thr Glu Cys Ile Leu Tyr Gly Tyr Arg Ser Lys Asp Gly Glu Trp Lys  
 35 40 45  
 Val Ile Asp Lys Tyr Glu Lys Ile Ser Arg Gly Leu Ile Cys Glu Asp  
 50 55 60  
 Tyr Pro Arg Ser Asp Pro Asn Ser Thr Asn Gly Phe Ala Gln Leu Leu  
 65 70 75 80  
 Ser Gly Gly Asp Val Val Ile Arg Ser Asn Leu Ser Ala Asp Ala Asn  
 85 90 95  
 Arg Lys Ser Lys Arg Tyr Ala Gly Gly Phe His Trp Ile Lys Val Thr  
 100 105 110  
 Phe Asp Ser Thr Ile Ala Ala Asp Arg Ala Cys Phe Tyr Ser Pro Gln  
 115 120 125  
 Glu Ile Asp Gly His Leu Val Phe Cys Glu Leu Tyr His Gly Ser Gly  
 130 135 140  
 Pro Ala Glu Asp Ala Pro Ile Pro Val Asp Ser Ser Arg Ala Val Gln  
 145 150 155 160  
 Phe Lys Ser Lys Ala Pro Arg Thr Leu Thr Thr Ser His Phe Thr Thr  
 165 170 175  
 Phe Leu His Pro Gln Asp Lys Asp Arg Leu Thr Arg Gln Arg Ala Glu  
 180 185 190  
 Gly Met Glu  
 195

<210> 43173  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 43173  
 Thr Ala Glu Val Gly Phe Thr Val Pro Asn Ser Trp Thr His Trp Gln  
 1 5 10 15  
 Asp Ala Glu Ala Arg Gly Glu Ser Ser Ile Cys Lys Ile Gln Thr Ala  
 20 25 30  
 Thr Pro Val Gly Phe Thr Ile Ser Tyr Val Phe Ser Phe Gly Val Asp  
 35 40 45  
 Ile Gly Arg Glu Ser Cys Cys Ile Tyr Asn Asn Gly Thr Lys Lys Leu  
 50 55 60  
 Ala Gln Thr Val Glu Trp Glu  
 65 70

<210> 43174  
 <211> 348  
 <212> PRT  
 <213> A.fumigatus

<400> 43174  
 Pro Lys Leu Ala Pro Val Thr Ala Asn Ile Gln Phe Val Lys Ser Leu  
 1 5 10 15  
 Gly Lys Pro Met Asn Val Arg Pro Gly Ser Leu Phe Arg Arg Pro Arg  
 20 25 30  
 Val Ser Asn Ser Ser Phe Gly Ser Arg Ser Cys Asn Gly Ser Arg Thr  
 35 40 45  
 Gln Asn His Thr Asn His Trp Arg Ala Gln Ser Tyr Ala Phe Thr Ser  
 50 55 60  
 Thr Arg Pro Thr Pro Ser Val Arg Ile Arg Pro Gly Leu Pro Lys Pro  
 65 70 75 80  
 Asn Pro Lys Pro Asn Glu Asn Thr Thr Arg His Ile Asn Asn Ala Arg  
 85 90 95  
 Ser Ser Glu Leu Pro Lys Ser Gly Ser Leu Tyr Gln Ile Arg Gly Leu  
 100 105 110  
 Ile Gly Lys Met Gln Lys Leu Glu Glu Arg Val Gln Ser Ala Lys Ser  
 115 120 125  
 Lys Leu Pro Pro Pro Ser Asp Ser Pro Ser Arg Thr Ser Ser Arg Ser  
 130 135 140  
 Gly Ser Ile Leu Gly Glu Ser Pro Val Ala Ser Thr Ile Thr Ala Arg  
 145 150 155 160  
 Arg Asn Ser Arg Lys Arg Leu Ser Gly Ser Ser Phe Ser Ser Ser Val  
 165 170 175  
 Arg Asp Gly Asp Ser Val Pro Ser Tyr Ala Pro His Ser Arg Pro Ser  
 180 185 190  
 Phe Gly Ala Arg Thr Gln Gly Asp Ser Arg Pro Ser Ser Arg Thr Ser  
 195 200 205  
 Tyr Ser Ser His Ser Ser Val Ser His Ser Thr His Pro Ser Val Thr  
 210 215 220  
 Pro Ser Thr Arg Pro Glu Ser Arg Gln Ser Arg Thr Lys Thr Pro Leu  
 225 230 235 240  
 Gly His Tyr Ser Thr Asn Pro Thr Thr Glu Ser Arg Arg Pro Arg Ser  
 245 250 255



## 19481

Ser Leu Ser Asn Pro Ser Asn Gln Asn Gly Val Val Asn Gly Met Ala  
 260 265 270  
 His Ile Asp Glu Asp Glu Asp Leu Ala Met His Met Ser Leu Arg Ala  
 275 280 285  
 Arg Ile Ser Glu Ile Arg Glu Thr Arg Leu Pro Ser Ile Ser Thr Pro  
 290 295 300  
 Pro Gly Leu Lys Lys Arg Thr Pro Ser Gly Ile Ser Gly Ile Pro Ala  
 305 310 315 320  
 Pro Arg Thr Leu Arg Thr Ser Thr Gly Phe Asp Arg Leu Glu Gly Gly  
 325 330 335  
 Leu His Arg Gly Leu Arg Gly Ser Val Tyr Val Lys  
 340 345

&lt;210&gt; 43175

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (61), (121)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43175

Tyr Leu Cys Leu Arg Val His Asp Gly Met Val Gly Ser Gly Val Leu  
 1 5 10 15  
 Ala Ala Gly Asp Cys Leu Ala Ala Gly Asp Phe Gly Gln Gly Val Ser  
 20 25 30  
 Pro Gly Trp Asp Arg Val Val Trp Ser Val His Tyr Leu Ser Ser Ser  
 35 40 45  
 Val Thr Ala Arg Val Leu Thr Ser Ala Gly Ile Pro Xaa Gly Phe Ala  
 50 55 60  
 Thr Ala Met Gly Leu Gly Cys Ala Ala Leu Thr Asn Asn Pro Ala Phe  
 65 70 75 80  
 Pro Thr Tyr Pro His Pro Leu Ser Pro Asp Gln Val Ala Ala Gly Leu  
 85 90 95  
 Ser Ala Pro Ala Thr Ala Ile Thr Leu Leu Gly His Gly Gly Ala Val  
 100 105 110  
 Leu Met Leu Ile Leu Leu Phe Met Xaa Val Thr Ser Ser  
 115 120 125

&lt;210&gt; 43176

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43176

Arg His Leu Val Phe Gly Phe Leu Val Ala Ala Arg Ile Glu Leu Ile  
 1 5 10 15  
 Gly Ser Pro Gly Arg Leu Tyr Asp Leu Leu Gln Glu Ala Ser Arg Glu  
 20 25 30  
 Met Pro Ile Ala Arg Asn Thr Asp Gly Ser Tyr Leu Ala Phe Arg Ser  
 35 40 45  
 Val Gly Gly Leu Val Phe Ala Ile Asp Ile Phe Val Ser Gly Phe Thr  
 50 55 60  
 Thr Val Trp Leu Asp Gln Ala Tyr Trp Gln Arg Ala Ile Ala Ser Arg

## 19482

65                      70                      75                      80  
 Pro Glu Thr Ser Val Lys Ala Tyr Leu Leu Gly Gly Ile Ala Trp Tyr  
                             85                      90                      95  
 Gly Arg Phe Ile Ile Ser Pro Arg Leu  
                             100                      105

<210> 43177  
 <211> 179  
 <212> PRT  
 <213> A.fumigatus

<400> 43177  
 Pro Asp Val Leu Glu Asn Leu Val Ser Gln Thr Thr Ile Ala Glu Lys  
 1                      5                      10                      15  
 Ile Gly Gln Glu Ser Thr Val Leu Ser Trp Leu Leu Ser Arg Ile Gln  
                             20                      25                      30  
 Gln Lys Glu Ser Pro Val Ser Gln Asn Lys Gln Tyr Ala Ala Glu Val  
                             35                      40                      45  
 Leu Thr Ile Met Leu Gln Ser Ser His Lys Asn Lys Asp Lys Phe Ile  
                             50                      55                      60  
 Gly Leu Asp Gly Val Asp Ile Leu Leu Gln Leu Leu Ser His Tyr Arg  
 65                      70                      75                      80  
 Lys Arg Asp Pro Glu Lys Asp Ser Asp Glu Glu Glu Tyr Val Glu Asn  
                             85                      90                      95  
 Leu Phe Asp Cys Leu Ile Cys Leu Val Asp Glu Asp Pro Gly Lys Glu  
                             100                      105                      110  
 Lys Phe Leu Glu Gly Glu Gly Ile Glu Leu Ala Gln Ile Met Leu Lys  
                             115                      120                      125  
 Glu Gly Lys Phe Ser Lys Gln Arg Ala Leu Arg Val Leu Asp His Ala  
                             130                      135                      140  
 Leu Gly Gly Leu Gly Gly Gly Pro Ala Cys Glu Arg Leu Val Glu Val  
 145                      150                      155                      160  
 Ala Gly Leu Arg Thr Ile Phe Gly Met Phe Met Arg Lys Val Gly Val  
                             165                      170                      175  
 Leu Phe Lys

<210> 43178  
 <211> 116  
 <212> PRT  
 <213> A.fumigatus

<400> 43178  
 Gly Ile Leu Gly Asp Ile Lys Leu Ile Phe Arg Val Ala Asp Ser Phe  
 1                      5                      10                      15  
 Arg Ser Ser Val Ile Glu Arg Ser Gln Ala Gly Asp Arg Ala Phe Val  
                             20                      25                      30  
 Asp Ser Ile Gly Thr Ile Gly Lys Pro Gln Ile Asp Ile Leu Phe Ile  
                             35                      40                      45  
 Val Glu Arg Gln Leu Ile Val Met Leu Ala Glu Asn Phe Gly Trp Ser  
                             50                      55                      60  
 Ile Ile Leu Glu Leu Ile Met Ile Leu Ala Lys Phe Thr Ser Val Val  
 65                      70                      75                      80  
 Glu Ile Ser Ile Leu Val Leu Arg Thr Phe Gly Arg Thr Leu Glu Gln  
                             85                      90                      95  
 Ile Phe Tyr Glu Thr Lys Arg Ile Val Gly Arg Ile Trp Ser Ile Thr

## 19483

100 105 110  
Phe Leu Ser Leu  
115

<210> 43179  
<211> 266  
<212> PRT  
<213> A.fumigatus

<400> 43179  
Tyr Leu Arg Thr Leu Ile Leu Thr Leu Asp Arg Leu Gly Asp Asn Ile  
1 5 10 15  
Ser Glu Trp Ser Lys Tyr Arg Ile Ser Ile Ser Gln Met Leu Ala Phe  
20 25 30  
Ala Ser Met Phe Gln Val Pro Met Ile Gly Ser Asp Val Cys Gly Phe  
35 40 45  
Gly Gly Asn Thr Thr Glu Glu Leu Cys Ala Arg Trp Ala Arg Leu Gly  
50 55 60  
Ala Phe Tyr Thr Phe Phe Arg Asn His Asn Glu Ile Thr Gly Ile Pro  
65 70 75 80  
Gln Glu Phe Tyr Arg Trp Pro Thr Val Ala Glu Ser Ala Arg Lys Ala  
85 90 95  
Ile Asp Ile Arg Tyr Arg Leu Leu Asp Tyr Ile Tyr Thr Ala Phe His  
100 105 110  
Arg Gln Thr Gln Thr Gly Glu Pro Phe Leu Gln Pro Met Phe Tyr Leu  
115 120 125  
Tyr Pro Lys Asp Lys Asn Thr Phe Ser Asn Gln Leu Gln Phe Phe Tyr  
130 135 140  
Gly Asp Ala Ile Leu Val Ser Pro Val Thr Asp Gly Ser Gln Thr Ser  
145 150 155 160  
Val Asp Ala Tyr Phe Pro Asp Asp Ile Phe Tyr Asp Trp His Thr Gly  
165 170 175  
Ala Ala Leu Arg Gly Arg Gly Ala Asn Val Thr Leu Ser Asn Ile Asp  
180 185 190  
Val Thr Glu Asn Pro Ile His Ile Arg Gly Gly Ser Ile Ile Pro Val  
195 200 205  
Arg Val Glu Ser Ala Met Thr Thr Pro Ser Cys Ala Lys Lys Ala Ser  
210 215 220  
Ser Ser Ser Ser Pro Gln Gly Leu Asp Gly Asn Ala Ser Gly Gln Leu  
225 230 235 240  
Val Ser Arg Thr Asn Gly Asp Ser Leu Glu Ala Ala Arg Arg Pro Ser  
245 250 255  
Asn Trp Glu Phe His Leu Pro Gln Arg Ala  
260 265

<210> 43180  
<211> 152  
<212> PRT  
<213> A.fumigatus

<400> 43180  
Ser Asp Gln Thr Ser Ala Gly Ser Ala Ala Thr Pro Pro Arg Ser Ser  
1 5 10 15  
Ala Leu Ala Gly Arg Val Ser Glu Pro Ser Thr Pro Ser Ser Ala Thr  
20 25 30  
Thr Met Lys Ser Pro Val Ser Arg Arg Ser Ser Thr Ala Gly Pro Pro

## 19484

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      35              40              45
Leu Pro Ser Pro Leu Ala Arg Pro Ser Thr Ser Ala Thr Gly Cys Leu
  50              55              60
Thr Thr Ser Thr Gln Pro Ser Thr Gly Arg Pro Arg Pro Ala Ser Pro
  65              70              75              80
Ser Cys Ser Pro Cys Ser Thr Ser Ile Pro Arg Thr Arg Thr Pro Ser
      85              90              95
Ala Thr Ser Cys Ser Ser Ser Thr Val Thr Pro Ser Trp Ser Ala Leu
      100              105              110
Ser Pro Thr Gly Ala Arg Leu Gln Leu Thr His Thr Ser Pro Met Ile
      115              120              125
Ser Ser Thr Ile Gly Thr Arg Ala Pro Pro Tyr Ala Ala Ala Glu Pro
      130              135              140
Thr Ser Pro Ser Ala Thr Ser Thr
145              150

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&lt;210&gt; 43181

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43181

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Pro Pro Met Asp Arg His Val Asn Ser Asp Thr Thr Ala Thr Ser Leu
  1              5              10              15
Thr Ser Ile Val Tyr Glu Leu Ala Arg His Leu Asp Glu Val Asp Lys
      20              25              30
Leu Arg Ala Glu Leu Asp Pro Ile Glu Ala Asp Ser Asp Gly Glu Tyr
      35              40              45
Gln His Asp Thr Leu Ala Lys Leu Pro His Leu Asn Gly Phe Ile Asn
  50              55              60
Glu Thr Leu Arg Leu His Pro Pro Ile Pro Gly Val Ile Pro Arg Lys
  65              70              75              80
Thr Pro Pro Glu Gly Ile His Val Lys Asp Val Phe Ile Pro Gly Asn
      85              90              95
Met Val Phe Thr Lys Gly Ala Lys Asp Arg Ala Lys Arg Glu
      100              105              110

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&lt;210&gt; 43182

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43182

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Lys Arg Arg Met Thr Gly Arg Met Val Asp Lys Tyr Ala Arg Glu Val
  1              5              10              15
Asp Asp Phe Ala Phe Leu Pro Ile Arg Gly Ser Arg His Arg Ser Glu
      20              25              30
Asp Glu Arg Glu Ala Ala His Gln Asp His Arg Leu Arg Val Thr Ile
      35              40              45
Gly Val Thr Gly Trp Leu Thr Glu Glu Asp Asn Phe Val Ile Pro Trp
  50              55              60
Arg Val Ile Gly Ala Glu Ser Glu Val Phe Gly Leu Arg Trp Glu Thr
  65              70              75              80
Glu Pro Leu Met Asn Leu Gly Asn Ala Leu Asp Leu Leu Val Thr Ser
      85              90              95
Ala Ala Trp Thr Ala Gly Glu Gln Val Leu Lys Lys Thr Phe Leu Ser

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## 19485

100 105 110  
 Gln Leu Leu Thr Ala Val Ala Leu Pro Leu Gly Leu Leu Lys Val Ala  
 115 120 125  
 Arg Val Val Asp Asn Pro Phe Ser Val Ser Lys Ala Arg Ala Asp Lys  
 130 135 140  
 Ala Gly Glu Val Leu Ala Asp Ala Leu Ile  
 145 150

<210> 43183  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 43183  
 Val Val Gly Asp Gly Gly Val Gly Gly Leu Ile Val Arg Gly Thr Ser  
 1 5 10 15  
 Gln Leu Ser Trp Val Ser Ser Pro Val Leu Pro Val Asn Gln Val Ser  
 20 25 30  
 Asp Leu Asp Trp Ala Leu Met Pro Ser Ala Gly Ile Thr Tyr Asp Asp  
 35 40 45  
 Met Lys Glu Leu Asn Ile Ser Cys Asp Leu Leu Cys  
 50 55 60

<210> 43184  
 <211> 151  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (35), (92)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43184  
 Val His His Leu Leu Leu Leu Ala Leu Val Cys Pro Trp Cys Lys Ser  
 1 5 10 15  
 Arg Thr Leu Leu Arg Val Gln Glu Thr Asp Glu Asn Ser Pro Pro Thr  
 20 25 30  
 Pro Thr Xaa Cys Ala Pro Ser Arg Val Pro Pro Met Ala Thr Glu Pro  
 35 40 45  
 Thr Thr Thr Ala Ser Met Tyr Leu Ala Ser Thr Ser Pro Ala Ser Ser  
 50 55 60  
 Arg Leu Pro Ala Arg Arg Thr Ser Pro Gly Arg Thr Thr Thr Ala Pro  
 65 70 75 80  
 Thr Ala Pro Ser Ser Arg Thr Leu Ser Ser Ser Xaa Gly Pro Pro Lys  
 85 90 95  
 Thr Pro Ser Ile Thr Ser Ser Leu Ser Arg Thr Ser Thr Arg Thr Pro  
 100 105 110  
 Ile Ser Ala Ser Phe Pro Ser Ser Pro Thr Ser Thr Pro Leu Ala Ala  
 115 120 125  
 Thr Ser Thr Pro Thr Pro Cys Thr Pro Pro Gly Leu His His Gly Gly  
 130 135 140  
 Arg Arg Ser Arg Ala Ser Glu  
 145 150

<210> 43185

<211> 240  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (176), (233)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43185  
 Lys Gly Lys Gly Trp Gly Lys Val Gly Gly Val Ser Ala Gly Gly Leu  
 1 5 10 15  
 Pro Ala Ser Thr Thr Phe Leu Gly Gly Val Gln Gly Ala Gly Val Gly  
 20 25 30  
 Thr Thr Trp Leu Asn Asn Gly Pro Leu Trp Asn Pro Arg Asn Gly Gly  
 35 40 45  
 Asn Pro Arg Ser Thr Lys Trp Cys Ser Val Tyr Arg Asp Leu Asp Ser  
 50 55 60  
 Val Lys His Asp Pro Asp His Ser Val Thr Gly Asp His Thr Glu Leu  
 65 70 75 80  
 Tyr Gly Thr Tyr Thr Pro Ser Lys Asp Ala Ile Ala Asp Gly Thr Leu  
 85 90 95  
 Lys Pro Thr Met Asn Gly Ser Val Glu Gln Gln Leu Ala His His Lys  
 100 105 110  
 Gly Leu Asp Pro Lys Val Ala Asp Glu Glu Val Met Gly Tyr Tyr Ser  
 115 120 125  
 Glu Asp Glu Ile Pro Thr Leu Val Asn Leu Val Asp Glu Phe Thr Thr  
 130 135 140  
 Phe Tyr Tyr Trp His Ser Cys Val Arg Gly Val Ser His Glu Pro Tyr  
 145 150 155 160  
 Tyr Glu Tyr Lys Arg Leu Met Arg Ile Ala His Gln Pro Gln Pro Xaa  
 165 170 175  
 Val Arg Pro Leu Gly Tyr Leu Arg Trp Pro Arg Asn Gln Arg Gln Gln  
 180 185 190  
 Leu Arg Cys Ile Trp Arg Arg His Leu Gln His Leu Pro Gly Cys Gln  
 195 200 205  
 Arg Glu Gly His His Leu Glu Glu Leu Arg Arg His Gln Arg Arg Leu  
 210 215 220  
 Pro Leu Gly Arg Ser Leu Leu Gln Xaa Asp Arg Pro Lys Arg Gln Ala  
 225 230 235 240

<210> 43186  
 <211> 120  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (7), (63)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43186  
 Pro Thr Asn Pro Asn Arg Xaa Cys Ala Leu Ser Gly Thr Ser Asp Gly  
 1 5 10 15  
 His Gly Thr Asn Asp Asn Ser Phe Asp Val Ser Gly Val Asp Ile Ser  
 20 25 30

## 19487

Ser Ile Phe Gln Val Ala Ser Glu Lys Asp Ile Thr Trp Lys Asn Tyr  
 35 40 45  
 Asp Gly Thr Asn Gly Ala Phe Leu Ser Asp Ala Leu Phe Phe Xaa Trp  
 50 55 60  
 Thr Ala Gln Asn Ala Lys His Asn Val Val Pro Leu Glu Asn Phe Tyr  
 65 70 75 80  
 Gln Asp Ala Tyr Leu Gly Leu Leu Pro Gln Leu Ser Tyr Ile Asn Pro  
 85 90 95  
 Ser Cys Cys Asp Leu Asp Thr Asn Ser Met His Pro Ser Gly Ser Ser  
 100 105 110  
 Pro Arg Gly Ala Lys Glu Pro Arg  
 115 120

&lt;210&gt; 43187

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43187

Val Ser Ser Gln Gln Gly Ala Thr His Glu Ser Leu Leu Lys Asn Asp  
 1 5 10 15  
 Ile Trp Asn Arg Asp Thr Val Leu Leu Leu Leu Thr Tyr Leu Ile Phe  
 20 25 30  
 Ala Leu Gly Asn Val Ser Phe Asn Ser Leu Phe Pro Ile Phe Ser His  
 35 40 45  
 Ala Ser Pro Pro Thr Gly Arg Ala Leu Thr Pro Arg Glu Ile Gly Leu  
 50 55 60  
 Ser Gln Gly Phe Ala Gly Leu Ala Thr Ile Leu Phe Gln Val Cys Ile  
 65 70 75 80  
 Phe Gly Arg Leu Arg Asp Lys Met Gly Asn Arg Trp Ser Tyr Arg Ala  
 85 90 95  
 Gly Leu Phe Gly Phe Val Leu Ser Phe Ile Leu Met Pro Phe Val Gly  
 100 105 110  
 Tyr Lys Gly Asp Asp Ala Asp Gly Arg Leu Thr Lys Lys Thr Ala Phe  
 115 120 125  
 Met Ala Ile Glu Leu Cys Phe Val Leu Leu Val Lys Thr Val Ala Ala  
 130 135 140  
 Val Gly Gly Leu Thr Ser Ala Leu Leu Leu Val Arg Leu Ser Phe Cys  
 145 150 155 160

&lt;210&gt; 43188

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43188

Pro Leu Ala His Ser Ala Glu Thr Phe Phe Arg Met Pro Arg Arg Lys  
 1 5 10 15  
 Cys Pro Asn Pro Cys Ala Val Tyr Lys Tyr His Pro Asp Glu Ala Leu  
 20 25 30  
 Ser Phe Trp Phe Phe Phe Ser Phe Gly Asn Phe Trp His Pro Thr Thr  
 35 40 45  
 Leu Ala His Thr Thr Thr Met Ser Ile Gly Lys Leu Leu Ser Asn Gly  
 50 55 60  
 Ala Leu Leu Val Asp Val Leu Ile Ile Gly Ala Gly Pro Ala Gly Leu  
 65 70 75 80

## 19488

Ser Thr Ala Thr Gly Leu Ala Arg Gln Leu His Thr Ala Val Val Cys  
                     85                    90                    95  
 Asp Ser Gly Val Tyr Arg Asn Ala Glu Thr Gln His Met His Lys Val  
                     100                    105                    110  
 Leu Gly Trp Asp His Arg Asn Pro Ala Glu Leu Arg Ala Ala Gly Arg  
                     115                    120                    125  
 Ala

<210> 43189  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43189  
 Ile Phe Ser Leu His Val Tyr Leu Trp Lys Met Val Tyr His Leu Gly  
 1                    5                    10                    15  
 Tyr Ala Leu Glu Arg Asp Leu Leu Val Gln Glu Val Gly Cys Leu Ala  
                     20                    25                    30  
 Pro Gly Thr Asn Phe Cys Ile Asp Pro Ser Ser Ile Tyr Trp Gly Val  
                     35                    40                    45  
 Ser Tyr Tyr Phe Ser Ser Glu Phe Arg Val Met Ala Ser Ser Val Gly  
                     50                    55                    60  
 Leu Leu Phe Leu Ser Leu Thr Ser Leu Leu Pro Arg Leu Leu  
 65                    70                    75

<210> 43190  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (65)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43190  
 Leu Gln Glu Thr Gly Asp Ser Gln Thr Leu Gln Asp Gly Ile Asp Cys  
 1                    5                    10                    15  
 Ala Leu Cys His Phe Arg Gln Glu Thr Pro Glu Ser Pro Met His Phe  
                     20                    25                    30  
 Glu Leu Leu Gln Gly Met Ser Asp Asn Ile Leu Ser Tyr Asp Thr Gly  
                     35                    40                    45  
 Cys Gly Leu Leu Pro Gln Arg Glu Ser Lys Asp Ala Arg Ala Ile Ala  
                     50                    55                    60  
 Xaa Arg Arg Gly  
 65

<210> 43191  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 43191  
 Ser Leu Ile Thr Tyr His Leu Ser Ile Cys Leu Ser Phe Tyr Asn Tyr  
 1                    5                    10                    15



19489

Arg Pro Phe His Arg Ser Ile Ser Ile Ser Leu Thr His Pro Thr Val  
 20 25 30  
 Ala Thr Ile Ser Thr Arg Leu Ile Pro Tyr Leu Phe Ser Thr Leu Ser  
 35 40 45  
 Ile Asp Ile Asp Ser Leu Val His His Leu Asp Phe Ile Ser Leu Ser  
 50 55 60  
 Ile Leu Ser Ser Lys Asp Ile Leu Leu Glu Pro Arg Ala Tyr Ala His  
 65 70 75 80  
 Pro

<210> 43192  
 <211> 154  
 <212> PRT  
 <213> A.fumigatus

<400> 43192  
 Arg Phe Thr Gln Pro Pro Met Arg Arg Ser Pro Ser Thr Asn Arg Phe  
 1 5 10 15  
 Ser Ser Ser Pro Ile Pro Glu Ala Arg Val Ser Ser Glu Glu Thr Ala  
 20 25 30  
 Gly Pro Ser Ile Met Phe Ala Pro Ser Ser Ser Pro Pro Arg Phe Pro  
 35 40 45  
 Asn Arg Leu Glu Ser Ile Tyr Thr Arg Leu Ser Ser Ser Gly Ala Arg  
 50 55 60  
 Ser Ala Ser Gly Tyr Pro Lys Gln Ala Ser Val Pro Leu Ser Phe Asp  
 65 70 75 80  
 Asp Leu Pro Ser Arg Ala Gln His Leu Ile Leu Asn Glu Leu Met Ala  
 85 90 95  
 Arg Gln Ser Ser Gln Thr Ala Val Ile Phe Thr Thr Leu Pro Ser Pro  
 100 105 110  
 Ser Glu Gly Thr Ala Gly Ser Glu Glu Thr Ser Glu Ser Tyr Leu Ser  
 115 120 125  
 Asp Leu Glu Val Leu Trp Gln Gly Leu Pro Pro Cys Leu Leu Val His  
 130 135 140  
 Ser Asn Ser Met Thr Val Thr Met Asn Leu  
 145 150

<210> 43193  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 43193  
 Lys Arg Ala Gln Ser Gln Cys Phe Pro Ser Val Met Lys Arg Gly Leu  
 1 5 10 15  
 Gly Asp Gly Thr Met Ala Glu Gln Ala Gly Ser Ile Arg Thr Pro Ala  
 20 25 30  
 Phe Gly Asp Gln Val Val Ser Ala Ser Ser Thr Thr Leu Leu Leu Ser  
 35 40 45  
 Cys Asn Pro Tyr Ser Leu Ile Lys Trp Gly Ala Pro Ala Phe Lys Phe  
 50 55 60  
 Ala Asp Phe  
 65

<210> 43194

<211> 62  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (7)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43194  
 Pro Lys Lys Pro His Phe Xaa Pro Glu Arg Ser Gln Thr Val Val Phe  
 1 5 10 15  
 Ser Val Arg Asn Ser Ala Phe Pro Tyr Leu Asp Gly Ser Met Thr Lys  
 20 25 30  
 Val Pro Leu Val Leu Val Lys Ala Leu Phe Glu Val Tyr Ala Pro Pro  
 35 40 45  
 Thr Leu Gly Arg Arg Lys Tyr Thr Arg Ala Leu Ser Ala Ser  
 50 55 60

<210> 43195  
 <211> 150  
 <212> PRT  
 <213> A.fumigatus

<400> 43195  
 Thr Val Pro Val Ser Phe Trp Arg Thr Gly Trp Asn Cys Gly Ser Pro  
 1 5 10 15  
 Ser Pro Leu Pro Leu Arg Leu Lys Arg Ser Phe Leu Met Ser Ile Ser  
 20 25 30  
 Gly Leu Ser Phe Ile Asp Gly Gly Arg Ser Pro Phe Arg Trp Arg Phe  
 35 40 45  
 Pro Ile Ala Phe Gln Ile Ile Phe Leu Ile Val Leu Phe Ala Ala Val  
 50 55 60  
 Trp Phe Phe Pro Glu Ser Pro Arg Trp Leu Val Lys Val Gly Arg Glu  
 65 70 75 80  
 Gln Glu Ala Arg Tyr Ile Leu Gly Arg Leu Arg Gly Ser Ser Gly Asp  
 85 90 95  
 Asp Ala Val Arg Ala Glu Ala Glu Phe Arg Asp Ile Gln Ser Val Ala  
 100 105 110  
 Glu Leu Glu Lys Thr Ile Asn His Ser Asn Ser Tyr Leu Ser Met Leu  
 115 120 125  
 Phe Gly Tyr Lys Ser Gly Lys Leu His Leu Gly Arg Arg Val Gln Leu  
 130 135 140  
 Val Ile Trp Leu Gln Ile  
 145 150

<210> 43196  
 <211> 143  
 <212> PRT  
 <213> A.fumigatus

<400> 43196  
 Leu Ile Lys Lys Asn Asn Pro Thr Asn Thr Tyr Pro Tyr Tyr Thr Ile  
 1 5 10 15  
 Phe Lys Ile Lys Ser Pro Ile His Ile Thr Tyr Lys Thr Ser Leu Pro  
 20 25 30

## 19491

```

Asn Pro Gln Asn Ile Asn Phe Ile Leu Pro Leu Thr Ile Leu Ile His
      35              40              45
Ile Thr His Lys Ser Ile Pro Leu Ser Ala His Thr His Lys Asn Leu
      50              55              60
Pro Leu Ser Pro Ser Leu Ser Ile His Leu Pro Thr Met Ser Ile Pro
65              70              75              80
Ile Ile Pro Pro Tyr Ser Leu Tyr Cys Leu His Lys Leu Ala Leu Ser
      85              90              95
Gln Ser Ile Asn His His Ser His Ile Asn Ile Pro Arg Pro Ser Asn
      100             105             110
Ser Thr Leu Pro Arg Ser His Ser Asn Lys Phe Leu Leu Phe Thr Leu
      115             120             125
Ala Thr Thr Pro Asn Gln Pro Leu Asn Ile Leu Ile Pro Pro Asn
      130             135             140

```

&lt;210&gt; 43197

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43197

```

Thr Pro Ser Ser Pro Val Leu Tyr Ala Leu Ile Asn Pro His Met Thr
1              5              10              15
Leu Leu Ala Pro Phe Gly Thr Gln Asn Thr Val Ala Tyr Ser Arg Ile
      20              25              30
Pro Gln Gly Leu Ser Thr Pro Ser Lys Pro Pro Gln Ser Ala Ile Pro
      35              40              45
Glu Asp Ser Thr Leu Ala Gly Ile Arg Thr Ala Leu Ser Arg Trp Arg
50              55              60
Asp His Trp Leu Ala Leu Arg Asn Thr Val Ser Ser His Glu Trp Ala
65              70              75              80
Ser Met Gly Phe Tyr Lys Asn Gly Tyr Asn Phe Trp Leu Val Ser Gln
      85              90              95
Leu Leu Ile Thr Lys Lys Lys Ser Val Asp Val Val Met Gln Met Glu
      100             105             110
Val Lys Cys Glu Asp Lys Leu Glu Lys Leu Lys Val Leu Leu Gln Asp
      115             120             125
Glu Asn Asp
      130

```

&lt;210&gt; 43198

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (67), (68), (69), (70), (71), (72), (73), (74), (75), (76), (77)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43198

```

Ile His Tyr Ala Tyr Pro Asn Phe Gln Asn Ile Ser Ile Phe Val Pro
1              5              10              15
Val Ser Ser Ser Ile Tyr Ala Gly Gly Ser Ala Asn Val Thr Ser Ser
      20              25              30
Pro Cys Asn Ser Ser Thr Phe Pro Val Asn Glu Ala Ser Pro Thr Ser

```

## 19492

|     |                     |                     |                     |                     |    |
|-----|---------------------|---------------------|---------------------|---------------------|----|
|     | 35                  |                     | 40                  |                     | 45 |
| Cys | Ala Thr             | Ala Arg Val         | Ala Val Asp Met Gly | Val Arg Ile Ile Asp |    |
|     | 50                  |                     | 55                  | 60                  |    |
| Leu | Asn Xaa Xaa Xaa Xaa | Xaa Xaa Xaa Xaa Xaa | Xaa Xaa Tyr Ser Thr |                     |    |
| 65  |                     | 70                  | 75                  | 80                  |    |

<210> 43199  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43199 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ile         | Thr | Leu | Gly | Val | Asp | Val | Ser | Val | Asn | His | Asp | Ser | Val | Val | Leu |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr         | Ala | Val | Thr | Leu | Thr | Ser | Asp | Gly | Gly | Ile | Ala | Asn | Asp | Asn | Arg |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp         | Trp | Gly | Asp | Gln | Val | Ala | Pro | Ala | Leu | Pro | Met | Tyr | Ala | Ser | Asp |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly         | Ser | Gly | Glu | Leu | Met | Phe | Asn | Asp | Pro | Gly | Phe | Glu | Ala | Gly | Pro |
|             |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Cys         | Ser | Ser | Trp | Lys | Trp | Lys | Tyr | Lys |     |     |     |     |     |     |     |
| 65          |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

<210> 43200  
 <211> 236  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43200 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Met         | Thr | Asp | Gly | Gly | Thr | Lys | Ser | Val | Ser | Pro | Phe | Pro | Ala | Gly | Pro |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val         | Gly | Glu | Tyr | Ile | Cys | Glu | Leu | Tyr | Gln | Gly | His | Asn | Gln | Leu | Arg |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu         | Leu | Gly | Leu | Ile | Gly | Ser | Asn | Cys | Leu | Ala | Asn | Ala | Arg | Asp | Phe |
|             |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Gln         | Ala | Pro | Val | Ala | Ser | Phe | Glu | Asp | Glu | Glu | Glu | Pro | Thr | Glu | Trp |
|             |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg         | Leu | Tyr | Ser | Lys | Phe | Asn | Asn | Thr | Leu | Phe | Ser | Ala | Arg | Gln | Asp |
| 65          |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| His         | Thr | Pro | Phe | Asp | Ile | Val | Ala | Trp | His | Gly | Asn | Tyr | Tyr | Pro | Tyr |
|             |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys         | Tyr | Asp | Leu | Gly | Arg | Phe | Asn | Thr | Ile | Gly | Ser | Ile | Ser | Phe | Asp |
|             |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| His         | Pro | Asp | Pro | Ser | Ile | Phe | Thr | Val | Leu | Thr | Gly | Pro | Ser | Asp | His |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala         | Gly | Thr | Ala | Ile | Ala | Asp | Phe | Val | Ile | Phe | Pro | Pro | Arg | Trp | Leu |
|             |     | 130 |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Val         | Ala | Glu | Asn | Thr | Phe | Arg | Pro | Pro | Trp | Tyr | His | Arg | Asn | Thr | Met |
| 145         |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Ser         | Glu | Phe | Met | Gly | Leu | Ile | Cys | Gly | Asn | Tyr | Asp | Ala | Lys | Thr | Gly |
|             |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Gly         | Gly | Phe | Gln | Pro | Ala | Gly | Ala | Ser | Leu | His | Asn | Val | Met | Ser | Ala |
|             |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| His         | Gly | Pro | Asp | Ala | Asp | Ala | Phe | Glu | Gly | Ala | Ser | Asn | Ala | Glu | Leu |
|             |     | 195 |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Lys         | Pro | Gln | Lys | Val | Gly | Asp | Gly | Ser | Met | Ala | Phe | Met | Phe | Glu | Arg |

## 19493

|                         |                         |     |     |     |
|-------------------------|-------------------------|-----|-----|-----|
| 210                     |                         | 215 |     | 220 |
| Tyr Val Val Leu Arg Tyr | Ile Glu Arg Phe Lys Tyr |     |     |     |
| 225                     | 230                     |     | 235 |     |

<210> 43201  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 43201  
 His Phe Ala Ala Val Ser Leu Ser Ala Lys Glu Leu Ala Asn Tyr Val  
 1 5 10 15  
 Ser Thr Trp Ser Phe Leu Leu Leu Thr Tyr Gly Val Leu Ala Ser Arg  
 20 25 30  
 Arg Cys Lys Asp Ala Pro Thr Ile Thr Glu Tyr Met Pro Lys Arg Gln  
 35 40 45  
 Val Gly Ser Glu Ala Thr Lys Arg Gln Val Arg Ala Arg Pro Trp Phe  
 50 55 60  
 Ala Thr Thr Trp Phe Arg Lys Gln Asn Asn Ile Asn Gly  
 65 70 75

<210> 43202  
 <211> 188  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (164), (174)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43202  
 Val Thr Leu Ala Arg Ile Phe Arg Pro Arg Gly Glu Asp Leu Ala Gly  
 1 5 10 15  
 Arg Thr Lys Thr Gly Val Thr Leu Gln Thr Leu His Val Lys His Phe  
 20 25 30  
 Asp His Gly Val Ile Leu Gln Gln Thr Pro Ala Pro Gly Phe Glu Ile  
 35 40 45  
 Pro Asn Pro Asp Thr Cys Thr Val Pro Glu Leu Leu Asn Ile Val Ala  
 50 55 60  
 Pro Lys Gly Ala Glu Ile Leu Leu Asp Gly Ile Arg Lys Gly Leu Phe  
 65 70 75 80  
 Val Pro Pro Ile Glu Asp Ala Gly Trp Arg Ala Ser Gln Gly Asp Glu  
 85 90 95  
 Pro Leu Ile His Ala Ala Lys Ile Lys Pro Glu Asp Arg His Ile Asp  
 100 105 110  
 Trp Val Asn Trp Thr Trp Lys Asp Ile Ser Arg Arg Asn Arg Val Leu  
 115 120 125  
 Gly Pro Leu Trp Asn Lys Thr Leu Ala Val Ser Asp Pro Thr Ser Gly  
 130 135 140  
 Asn Pro Leu Phe Arg Gln Arg Arg Val Ile Leu Ser Glu Met Glu Glu  
 145 150 155 160  
 Val Asp Thr Xaa Lys Gly Cys Glu Ala Phe Ser Leu Ile Xaa Gly Leu  
 165 170 175  
 Pro Phe Val Asp Ser Ala His Pro Ile Asp Arg Gln  
 180 185

<210> 43203  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (138), (139)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43203  
 Ala Thr Pro Asp Glu Lys Val Ala Val Pro Leu Arg Ala His Ala Phe  
 1 5 10 15  
 Thr Ala Thr Pro Glu Ser Met Arg Leu Ala Asn Glu Glu Gly Pro Asn  
 20 25 30  
 Gln Leu Asp Pro Lys Ala Ile Thr Pro Gly His Leu Asp Gly Gln Gly  
 35 40 45  
 Trp Pro Glu Ser Phe Leu Asp Asp Phe Glu Ser Arg Ile Trp Ile Thr  
 50 55 60  
 Tyr Arg Ser Asn Phe Pro Pro Ile Pro Lys Pro Ile Asp Arg Asp Ala  
 65 70 75 80  
 Phe Ser Thr Met Thr Leu Ser Val Arg Leu Arg Ser Gln Leu Val Asp  
 85 90 95  
 Gln His Gly Phe Thr Ser Asp Thr Gly Trp Gly Cys Met Ile Arg Ser  
 100 105 110  
 Gly Gln Ser Leu Leu Ala Ser Ala Met Ser Ile Leu Leu Phe Gly Gly  
 115 120 125  
 Gly Thr Asn Gln Arg Leu Asp His Val Xaa Xaa Arg Asp Thr Arg Thr  
 130 135 140  
 Ser Asn Arg  
 145

<210> 43204  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43204  
 Thr Pro Leu Ser Tyr Asn Val Ile Leu Met Asp Ile Asn Met Pro Val  
 1 5 10 15  
 Met Asn Gly Leu Glu Ala Thr Thr Lys Ile Arg Glu Val Asn Ser Glu  
 20 25 30  
 Val Pro Ile Ile Ala Leu Thr Gly Asn Ala Leu Lys Gly Asp Ala Glu  
 35 40 45  
 Thr Tyr Leu Ala Arg Gly Met Asn Asp Tyr Val Ala Lys Pro Val His  
 50 55 60  
 Arg Lys Arg Leu Val Gln Leu Leu Trp Lys Trp Leu Gly Ser  
 65 70 75

<210> 43205  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 43205

## 19495

```

Leu Lys Val Gly Leu Asp Ala Pro Ser Phe Ala Arg Thr Pro Ile Tyr
1      5      10      15
His Ser Ser Arg Pro Gln Leu Ser Gly Val Ser Leu Ile Leu Asn Glu
      20      25      30
Ala Leu Ser Leu Val Gly Phe Glu Leu Ser Gly Tyr Ala Ser Phe Ile
      35      40      45
Ala Ser Ser Ile Ala Lys Arg Asn Gly Leu Asp Gly Tyr Gln Leu Leu
      50      55      60
Glu Ser Ser Pro Arg Gly Trp Lys Ile Arg Asp
65      70      75

```

&lt;210&gt; 43206

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (113), (114), (115), (116), (117), (118), (193)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43206

```

Tyr Asn Tyr Lys Thr Lys Ser Ala Ser Ser Gln Gln Arg Thr His Ile
1      5      10      15
Thr Arg Phe Thr Leu Cys Pro Asp Leu Tyr Thr Leu Thr Ile Thr Asp
      20      25      30
Lys Ala Pro Asn Ala Asp Asn Ser Val Ile Thr Tyr Ser Tyr Ile Gly
      35      40      45
Ser Val Asp Pro Glu His Ala Thr Ser Glu Ser Arg Glu Arg Asn Leu
      50      55      60
Val Leu Val Phe Asp Pro Asp Arg Lys Val Phe Val Leu Glu Ser Ile
65      70      75      80
Ala Thr Gln Leu Asn Phe Asn Leu Arg Ser Ala Pro Asn Lys Thr Glu
      85      90      95
Lys Gln Val Thr Glu Gln Tyr Ala Gln Leu Arg Thr Leu His Asp Asp
      100      105      110
Xaa Xaa Xaa Xaa Xaa Xaa Asp Gly Ala Val Glu Thr Ala Ala Asp Thr
      115      120      125
Asp Asp Gly Pro Ala Asp Ala Ser Asn Pro Tyr Asp Tyr Arg His Phe
      130      135      140
Leu Pro Lys Glu Asn Ala Asp Asp Asp Lys Ser Val Ser Asp Gly Ala
145      150      155      160
Ile Ser Ala His Leu Asn Ala Ser Lys Ser Asn Thr Pro Leu Met Thr
      165      170      175
Gly Thr Ala Lys Pro Ile Phe Thr Thr Gly Pro Glu Gly Ala Glu Lys
      180      185      190
Xaa

```

&lt;210&gt; 43207

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43207

```

Asn Pro Thr Leu Leu Trp Pro Leu Ser Leu Val Leu Asp Ile Val Met

```

## 19496

```

1           5           10           15
Leu Val Ser Val Ile Leu Thr Pro Ala Leu Leu Leu Gly Val Ala Asn
                20           25           30
Ala Ala Thr Leu Ala Lys Arg Trp Ser Asn Gly Asp Val Ala Thr Gly
                35           40           45
Thr Thr Asp Pro Asn Val Ala Ser Gly Cys Thr Tyr Trp Ala Asn Ser
                50           55           60
Ile Ala Ser Ser Asp Thr Cys Glu Ser Leu Asn Ala Tyr Phe Gly Ile
65           70           75           80
Thr Ile Ala Gln Leu Val Ser Trp Val Arg Val Asn Leu Ser Pro Leu
                85           90           95
Ser

```

&lt;210&gt; 43208

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43208

```

Ile Val Gly Ala Val Tyr Gln Cys Lys Cys Asn Thr Leu Gly Gly His
1           5           10           15
Ser Ala Tyr Leu His Ile Asn Glu Leu Val Gln Leu Ala Ala Asn Ala
                20           25           30
Phe His Gly Val Ala Cys Asn Phe His Ile Thr Lys Gly Lys His Ser
                35           40           45
Cys Thr Gly Asp Cys Pro Met Gly Leu Met Ser Leu Arg Arg Gln Phe
50           55           60
Ser Arg Trp Arg Trp Met Ile Glu Phe Leu Ile Phe Leu Ile
65           70           75

```

&lt;210&gt; 43209

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43209

```

Ser Leu Val Ser Tyr Ser Leu Ser Arg Thr Cys Gln Pro Ser Asn Gln
1           5           10           15
Val Gln Val Leu Ala Val Trp Ala Gly Leu Ala Leu Asn Gly Asp Val
                20           25           30
Val Pro Glu Asp Glu Leu His Val Tyr Val Gln Asp Ala Leu Asp Glu
                35           40           45
Leu Glu Phe Leu Thr Gly Ser Val Glu Thr Lys Tyr Gly Ala Leu Arg
50           55           60
Ala Ser Val Gly His Pro Glu Pro Trp Val Ile Arg Tyr Val Glu Val
65           70           75           80
Gly Asn Glu Asp Asn Leu Asn Asn Gly Leu Ala Ser Tyr Ser Ser Tyr
                85           90           95
Arg Phe Lys Ala Phe Tyr Asp Ala Ile Lys Ala Lys Tyr Pro Asp Ile
                100           105           110
Thr Val Leu Ala Ser Thr Ile His Leu Thr Phe Ser His Thr Ala Gly
                115           120           125
Arg Arg Thr Ser Val
130

```



<210> 43210  
 <211> 176  
 <212> PRT  
 <213> A.fumigatus

<400> 43210  
 Arg Val Cys Phe Gln Pro Arg Gly Glu Asp Ile Ser Pro Cys Thr Ile  
 1 5 10 15  
 Arg Asn Ile Cys Ser Gln Leu Ser Ser Gly Arg Val Ser Thr Arg Cys  
 20 25 30  
 Leu Val Ser Asn Ser Asn Ile Thr Thr Ile Thr Asp Ser Gln Cys Gly  
 35 40 45  
 Asn Gly Ile Val Glu Val Gly Glu Glu Cys Asp Cys Gly Ala Thr Cys  
 50 55 60  
 Asp Gln Asn Ser Cys Cys Asp Gly Ser Thr Cys Arg Leu Arg Ala Gly  
 65 70 75 80  
 Ala Leu Cys Asp Asp Ala Ala Ser Pro Cys Cys Thr Asn Cys Gln Phe  
 85 90 95  
 Ala Ser Ala Asp Thr Val Cys Arg Pro Ser Thr Gly Pro Cys Asp Val  
 100 105 110  
 Glu Glu Met Cys Thr Gly Asn Ser Thr Ile Cys Pro Val Asp Arg Val  
 115 120 125  
 Leu Ser Gly Gly Gln Arg Cys Gly Asp Gly Glu Gly Gly Ser Gly Asn  
 130 135 140  
 Pro Ser Cys Ser Asn Gly Glu Cys Arg Arg Asn Glu Thr Ser Trp Val  
 145 150 155 160  
 Asp Ser His Arg Ser Leu Ile Ile Gly Leu Ala Ala Gly Ile Gly Gly  
 165 170 175

<210> 43211  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 43211  
 Phe Ser Ile Ser Thr Ala Phe Pro Lys Ser Lys Arg Glu Asp Thr Lys  
 1 5 10 15  
 Gly Ser His Asn Ser Pro Ala Val Val Ile Met Trp Glu Thr Val Ser  
 20 25 30  
 Ser Ser Thr Lys Gly Gln Gln Ala Ala Asn Ser Gly Cys Thr Leu Ser  
 35 40 45  
 Asn Lys Leu Leu Phe Ser Met Ser Asp Asp Cys Gly Ala Val Asn Gly  
 50 55 60  
 Glu Thr Met Val Val Leu Val Thr Pro Val  
 65 70

<210> 43212  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

<400> 43212  
 Gln Gly Ala Ser Val Arg Thr Val Phe Ser Ser Val Ala Ala Ser Tyr  
 1 5 10 15  
 Asp Thr Met Asn Asp Phe Met Ser Leu Gly Ile His Arg Leu Trp Lys  
 20 25 30

## 19498

Asp His Phe Val Arg Ser Leu Asn Pro Gly Ser Ala Leu Pro Ser Arg  
           35                  40                  45  
 Asp Asn Asp Ala Thr Gly Lys Gly Trp Asn Ile Leu Asp Ile Ala Gly  
   50                  55                  60  
 Gly Thr Gly Asp Ile Ala Phe Arg Met Leu Asp His Ala Thr Asn Ile  
 65                  70                  75                  80  
 Asn Asn Asp His Gln Thr Arg Val Thr Ile Ala Asp Ile Asn Pro Asp  
                   85                  90                  95  
 Met Leu Ala Glu Gly Lys Lys Arg Ser Ile Ser Thr Pro Tyr Tyr Asn  
                  100                 105                 110  
 Thr Pro Arg Leu Ser Phe Met Glu Ala Asn Ala Gln His Met Pro Val  
                  115                 120                 125  
 Val Asn Thr Pro Ser Gly Ser Met Arg Arg Thr  
          130                 135

&lt;210&gt; 43213

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (12)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43213

Gly Asp Leu Pro Gly His Trp Ala Met Ser Gly Xaa Ile Ile Phe Trp  
 1                  5                  10                  15  
 Gln Met Arg Ser Pro Ser Pro Phe Asp Thr Leu Gly Pro Gly Arg Gly  
                  20                 25                 30  
 Asn Ala Arg Ile Glu Asp Arg Phe Leu Glu Gln Asp His Gly Glu Glu  
                  35                 40                 45  
 Leu Glu Asp Trp Val Tyr Gly Glu Lys Ile Val Tyr Thr Arg Asp Thr  
 50                 55                 60  
 Phe Phe Cys Cys Asp His Arg Gln Ser Ala Pro Asp Ala Lys Asp Ala  
 65                 70                 75                 80  
 Arg Ile Thr Trp Glu Gln Glu Gln Glu Arg Arg Trp Arg Met Arg Lys  
                  85                 90                 95  
 Glu Leu Phe Pro Asn Leu Ser Asp Asp Thr Ile Ile Leu Gly Asn Phe  
                  100                 105                 110  
 Asn Gln Leu Tyr Lys Val Ser Ile Val Leu Met Met Met Cys Asp  
                  115                 120                 125

&lt;210&gt; 43214

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (140)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43214

Ser Met Leu Ser Leu Phe Ile Gln Ile Glu Pro Thr Thr Phe Arg Thr  
 1                  5                  10                  15

## 19499

Trp Leu Arg Ile Leu Ala Arg Ile Pro Asn Ala Val Leu Trp Leu Leu  
                   20                  25                  30  
 Arg Phe Pro Asp Leu Gly Glu Gln Asn Leu Arg Glu Thr Ala Ile Ala  
                   35                  40                  45  
 Trp Ala Gly Arg Glu Thr Ala Ser Arg Ile Ile Phe Thr Asp Val Ala  
                   50                  55                  60  
 Pro Lys Asn Ala His Ile Ser Arg Ala Lys Ile Leu Asp Leu Phe Leu  
                   65                  70                  75                  80  
 Asp Thr Pro Glu Cys Asn Ala His Thr Thr Ala Thr Asp Val Leu Trp  
                   85                  90                  95  
 Ser Gly Thr Pro Leu Leu Thr Tyr Pro Arg Tyr Lys Tyr Lys Met Cys  
                   100                  105                  110  
 Ser Arg Met Ala Ser Ser Ile Leu Ser Ser Ala Leu Pro Asp Ser Asp  
                   115                  120                  125  
 Ala Gly Arg Lys Ala Pro Asp Glu Leu Thr Gly Xaa Asn Arg Arg Ala  
                   130                  135                  140  
 Trp Lys Val Leu His  
 145

<210> 43215  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 43215  
 Lys Thr Asp Leu Gly Asp Val Leu Asp Ser Ile Lys Leu Gly Asp Ala  
 1                  5                  10                  15  
 Gln Asp Gly Gly Gly Lys Thr Gln Thr Val Ala Leu Arg Gly Ile His  
                   20                  25                  30  
 Leu Gln Glu Ile Ala Leu Arg Thr Asn Val Thr Leu Glu Arg His Asp  
                   35                  40                  45  
 Asn Ser Leu Pro Asn Arg Val Asn Gly Arg Val Gly Asp Leu Ser Glu  
                   50                  55                  60  
 Glu Leu Ala Glu Val Phe Val Lys Lys Ala Arg Leu Leu Arg His Ala  
                   65                  70                  75                  80  
 Gly Gln Trp Ser Ile Ile Thr His  
                   85

<210> 43216  
 <211> 241  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (4), (5)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43216  
 Trp Gly Tyr Xaa Xaa Ala Asn Leu Asp Arg Asn Gly Leu Arg Pro Cys  
 1                  5                  10                  15  
 Arg Phe Tyr Val Thr Asp Asp Asp Arg Ile Ile Cys Ala Ser Glu Val  
                   20                  25                  30  
 Gly Ala Val Asp Ile Asp Pro Glu Arg Val Val Gln Lys Gly Arg Leu  
                   35                  40                  45  
 Gln Pro Gly Lys Met Leu Leu Val Asp Thr Val Ala Gly Arg Ile Ile

## 19500

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |     |
| Asp | Asp | Ala | Glu | Leu | Lys | His | Thr | Val | Ala | His | Arg | Gln | Asp | Phe | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Trp | Leu | Asp | Lys | Glu | Leu | Leu | Lys | Leu | Pro | Asp | Ile | Asn | Arg | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Leu | Glu | Gln | Asn | Val | Asp | Leu | Ser | Tyr | Thr | Leu | Asp | Asp | Thr | Thr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Gln | Asn | Asp | Pro | Arg | Leu | Lys | Ala | Phe | Gly | Tyr | Ser | Phe | Glu | Gln |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Ser | Leu | Leu | Leu | Gly | Pro | Met | Ala | Ala | Asp | Ser | Lys | Glu | Ala | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Ser | Met | Gly | Asn | Asp | Ala | Pro | Leu | Ala | Cys | Met | Ala | Gln | Gln | Pro |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Leu | Leu | Tyr | Glu | Tyr | Phe | Arg | Gln | Leu | Phe | Ala | Gln | Val | Thr | Asn |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Pro | Pro | Ile | Asp | Pro | Ile | Arg | Glu | Ala | Val | Val | Met | Ser | Leu | Glu | Cys |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Tyr | Val | Gly | Pro | Gln | Gly | Asn | Leu | Glu | Met | Asp | Ala | Ser | Gln | Cys |     |
|     | 195 |     |     |     |     | 200 |     |     |     | 205 |     |     |     |     |     |
| Asn | Arg | Leu | Arg | Leu | Pro | Ser | Pro | Ile | Leu | Ser | Ile | Pro | Glu | Phe | Asn |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ala | Ile | Lys | His | Ile | Thr | Gln | Val | Cys | Leu | Leu | Arg | Gln | Pro | Ala | Glu |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     |     | 240 |
| Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43217

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43217

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asn | Arg | Leu | Leu | Asp | Val | Leu | Ala | Gln | Arg | Lys | Asp | Ser | Gly | Glu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Ile | Tyr | Gly | Ser | Ile | Leu | Ile | Asp | Gly | Arg | Pro | Gln | Gly | Ile | Ser | Phe |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Gln | Arg | Thr | Thr | Gly | Tyr | Cys | Glu | Gln | Met | Asp | Val | His | Glu | Pro | Thr |
|     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |
| Ala | Thr | Val | Arg | Glu | Ala | Leu | Val | Phe | Ser | Ala | Leu | Leu | Arg | Gln | Pro |
|     | 50  |     |     |     | 55  |     |     | 60  |     |     |     |     |     |     |     |
| Ala | His | Val | Pro | Arg | Glu | Lys | Leu | Ala | Tyr | Val | Asp | His | Ile | Ile |     |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |     |
| Asp | Leu | Leu |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43218

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43218

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Arg | Ile | Phe | Gln | Pro | Phe | Gly | Gln | Asp | Tyr | Val | Leu | Thr | Ala | Leu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |     |
| Gly | Leu | Glu | Leu | Leu | Asn | Ser | Gln | Gly | Gly | Ser | Ser | Val | Leu | Leu | Tyr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Lys | Arg | Gly | Ser | Gln | Lys | Thr | Arg | Ser | Glu | Asp | Thr | Thr | Thr | Pro | Val |

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```
<210> 43219
<211> 81
<212> PRT
<213> A.fumigatus
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<210> 43220
<211> 220
<212> PRT
<213> A.fumigatus
```

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 43220 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Ser         | Asn | Phe | Gly | Ser | Gly | Arg | Asp | Ala | Met | Gln | Ser | Glu | Leu | Leu | Tyr |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Arg         | Arg | His | Leu | Lys | Lys | Gly | Asp | Ile | Phe | Val | His | Ala | Asp | Leu | Glu |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Gly         | Ala | Arg | Pro | Met | Ile | Val | Lys | Asn | Arg | Pro | Gly | Thr | Pro | Asp | Ala |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Pro         | Ile | Pro | Pro | Ser | Thr | Leu | Ser | Gln | Ala | Gly | Asn | Leu | Cys | Val | Ala |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Thr         | Ser | Ser | Ala | Trp | Glu | Ser | Lys | Ala | Val | Met | Ala | Ala | Trp | Trp | Val |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Asn         | Ala | Asn | Gln | Val | Thr | Lys | Thr | Thr | Thr | Gly | Gly | Leu | Leu | Pro | Thr |  |
|             |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Gly         | Glu | Phe | Glu | Ile | Lys | Gly | Glu | Lys | Asn | Phe | Leu | Ala | Pro | Ser | Gln |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Leu         | Val | Leu | Gly | Phe | Ala | Val | Met | Phe | Gln | Ile | Ser | Lys | Asn | Ser | Leu |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Lys         | Asn | His | Lys | Ile | His | Ile | Phe | Glu | Asp | Ala | Thr | Pro | Thr | Glu | Pro |  |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Ser         | Ala | Lys | Glu | Ser | Gly | Thr | Ala | Lys | Glu | Ile | Val | Asp | Asn | Glu | Gln |  |
| 145         |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |
| Ser         | Val | Ala | Gln | Asp | Leu | Gly | Pro | Ala | Glu | Thr | Asp | Lys | Cys | Ala | Ala |  |

# 19502

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Asn | Arg | Pro | Ile | Glu | Gln | Glu | Arg | Lys | Ser | Asn | Ser | Glu | Ser | Glu | Asn |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Lys | Glu | Val | Glu | Pro | Gly | Leu | His | Ser | Ala | Glu | Gly | Thr | Pro | Tyr | Ser |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Gly | Gly | Val | Ser | Glu | Pro | Leu | Tyr | Glu | Thr | Lys | Lys |     |     |     |     |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |

<210> 43221  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 43221 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Gly         | Val | Ala | Ala | Val | Arg | Asp | Glu | Val | Ser | Val | Ser | Asp | Ser | Ala | Leu |  |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Ser         | Leu | Ala | Phe | Glu | Met | His | Gln | Pro | Lys | Ser | Leu | Arg | Lys | Tyr | Leu |  |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |  |  |
| Arg         | Glu | Leu | Lys | Leu | Leu | Ala | Glu | Ala | Val | Val | Cys | Ile | Cys | Glu | Phe |  |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Gly         | Gly | Trp | Gly | Thr | Gln | Ala | Arg | Ser | Ser | Leu | His | Asn | Ser | Arg | Arg |  |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Arg         | Thr | Leu | Ile | Pro | Pro |     |     |     |     |     |     |     |     |     |     |  |  |
| 65          |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 43222  
 <211> 102  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (102)  
 <223> Identity of amino acid sequences at the above locations are unknown.

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 43222 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Gly         | Ser | Phe | Gly | Pro | Ser | Gly | Phe | Phe | Asp | Leu | Glu | Val | Ala | Thr | Ser |  |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Thr         | Val | Val | Asp | Trp | Pro | Thr | Gly | Val | Trp | Trp | Val | Thr | Leu | Asp | Val |  |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |  |  |
| Ile         | Gly | Asp | Lys | Glu | Thr | Gln | Arg | Gly | Thr | Arg | Lys | Arg | Arg | Asn | Asn |  |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Ala         | Leu | Gly | Phe | Asp | Arg | Arg | Leu | Ala | Arg | Leu | Ile | Glu | Lys | Arg | Phe |  |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Arg         | Ser | Ala | Tyr | Ser | Asn | Ile | Val | Thr | Arg | Ala | Met | Gln | Asp | Ser | Met |  |  |
| 65          |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |  |  |
| Thr         | Pro | Val | Thr | Tyr | Asn | Gly | Arg | Asn | Lys | Ile | Ala | Ser | Arg | Leu | Leu |  |  |
|             |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |
| His         | Phe | Pro | Gly | Cys | Xaa |     |     |     |     |     |     |     |     |     |     |  |  |
|             |     |     | 100 |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 43223  
 <211> 129  
 <212> PRT  
 <213> A.fumigatus

## 19503

&lt;400&gt; 43223

```

Ser Leu Ser Arg Thr Val Asp Leu Glu Leu Thr Ile Ser Leu Ile Ala
1      5      10      15
Ala Ala Asp Asp Lys Gly Val Val Asn Asn Ile Leu Thr Val Gly Ser
20      25      30
Ser Ser Ile Ala Ala Ala Pro Gly Ala Glu Ala His Ala Val Glu Lys
35      40      45
Glu Thr Glu Thr Pro Leu Glu Asn Gly Ala Ser Glu Lys Val Glu Glu
50      55      60
Thr Ala Lys Glu Pro Gly Val Gln Ser Thr Thr Thr Thr Glu Ala Val
65      70      75      80
Lys Asp Glu Val Pro Glu Lys Thr Asp Asp Ser Val Val Val Glu Lys
85      90      95
Asp Leu His Val Glu Ser Glu Pro Ala Thr Gln Glu Val Lys Pro Lys
100     105     110
Leu Val Ser Glu Pro Ser Lys Pro Ser Asp Ile His Glu Asp Ala Glu
115     120     125
Thr

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&lt;210&gt; 43224

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43224

```

Cys Glu Glu Val Ala Gly Ile Leu Glu Ser Ser Gly Ser Tyr Tyr Leu
1      5      10      15
Leu Asp His Leu Ala Phe His Pro Thr Leu Phe His Val Ser Ile Leu
20      25      30
Val Cys Tyr Cys Ile Pro Leu Thr Arg Met Met Lys Ser Ile Arg Phe
35      40      45
Leu Ala Ser Ala Leu Ala Leu Cys Leu Val Asp Ala Tyr Leu Val Thr
50      55      60
Pro Pro Gly Thr Pro Ala Pro Gly Ala Ala Ser Ala Cys Ser Ala Trp
65      70      75      80
Val Gln Ala Ser Tyr Gly Leu Thr Cys Asp Ile Ile His Arg Phe Tyr
85      90      95
Gly Met Thr Ala Ala Glu Phe Glu Glu Trp Val Ser Lys Cys Pro Ala
100     105     110
Ala Gln Leu Tyr Pro Leu Asn Tyr Ile Cys Thr Asp Ser Ala Lys Lys
115     120     125
Pro Ser Val Ser Gln Leu Gly Asp Gly Cys Thr Leu Ile Ser Gly Leu
130     135     140
Tyr Tyr Cys Val Gln Val Asn Tyr Ile Pro Gln Lys Ser Thr Leu Glu
145     150     155     160
Pro Ala His Asp Tyr Asp Thr Phe His Gln Leu Ala Gln Pro Gly Lys
165     170     175
Ala Ser Pro Arg Arg Leu Pro Thr His Thr Gly Leu Gly Glu Gln Leu
180     185     190
Ala Pro Ser Ser Asn Trp Val Val Asn Gly Glu Pro Leu Leu Pro Asn
195     200     205
Leu Gln Ala Ala Pro Gly Asn Ile Ser
210     215

```

&lt;210&gt; 43225

19504

<211> 110  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (36)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43225  
Leu Ala Cys Thr Phe Gly Ser Thr Val Ile Ala Tyr Leu Ile Ala Ser  
1 5 10 15  
Gly Ile Pro Phe Phe Asn Asn Leu Val Ser Leu Ile Gly Ala Phe Leu  
20 25 30  
Gly Val Ile Xaa Ala Tyr Gln Pro Thr Gly Cys Met Trp Phe Tyr Asp  
35 40 45  
Asn Trp Arg Lys Arg Asp Thr Gly Asn Trp Lys Trp Ile Leu Met Ala  
50 55 60  
Cys Trp Asn Val Phe Val Ile Leu Ile Gly Ser Phe Met Thr Val Ala  
65 70 75 80  
Gly Thr Tyr Gly Ala Ile Val Asn Ile Val Asn Ser Leu Ala Glu Asp  
85 90 95  
Gly Gly Ser Lys Pro Trp Thr Cys Ala Asp Asn Ser Asn Ser  
100 105 110

<210> 43226  
<211> 131  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (103)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43226  
Pro Asp Lys Thr Tyr Asp Thr Thr Asp Ile Asn His Ala Ala Ser Leu  
1 5 10 15  
His Pro Arg Arg Thr Leu Arg Val Asn Pro Leu Asp Arg Ile Ala Arg  
20 25 30  
Pro Pro Val Pro Gln Thr Leu Pro Pro Ser Pro Gly Leu Pro Arg Ser  
35 40 45  
Asn Tyr Lys Ser His Leu Pro Leu His Pro Ser Arg Arg Pro Cys Arg  
50 55 60  
Arg Gly Gln Arg Thr Pro Gln Gln Arg His Arg Arg Asp Arg Ser Ser  
65 70 75 80  
Lys Arg Ser Pro Ala Thr Tyr Pro Ala Leu Ser Thr Arg Asp Pro Gln  
85 90 95  
Gly Val Gly Tyr Cys Thr Xaa Arg Phe Lys Glu Thr Glu Thr Ala Asp  
100 105 110  
Pro Arg His Val Met Phe Glu Ala Asn Ser Gly Thr Gly Phe Arg Asn  
115 120 125  
Glu Pro Arg  
130

<210> 43227



19505

<211> 159  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (152), (153)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43227  
Cys Ile Pro Ala Lys Asn Asp Asp Phe Pro Ser Thr Ser Asn Thr Ser  
1 5 10 15  
Thr Ser Ala Ser Cys Leu Gly Ser Ser Arg Thr Phe Ser Leu Arg Pro  
20 25 30  
Ser Cys Pro Thr Pro Pro Ser Pro Phe Asn Ala Lys Ser Leu Ser Ser  
35 40 45  
Ala Pro Ser Ala Arg Ser Ser Gly Ser Lys Thr Thr Ser Ser Pro Asn  
50 55 60  
Gly Val Ser Ala Thr Glu Lys Ser Thr Pro Thr Arg Cys Pro Arg Ser  
65 70 75 80  
Ser Leu Thr Thr Arg Lys Ala Ile Ser Ala Arg Arg Arg Phe Ser Gly  
85 90 95  
Thr Ala Ala His Gln Arg Ala Pro Ala Met Met Thr Ala Pro Val Ser  
100 105 110  
Arg Ala Val Trp Leu His Leu Pro His Leu Arg Val His Phe Arg Ile  
115 120 125  
Trp Arg Gly Arg Pro Pro Arg Gln Arg Ser Gly Leu Asp Gly Asp His  
130 135 140  
Asp Ala Asp Ser Cys Leu Leu Xaa Xaa Thr Pro Gly Thr Gly Arg  
145 150 155

<210> 43228  
<211> 68  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (64)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43228  
Thr Lys Ser Phe Val Glu Gln Asp Ile Thr Val Val Pro Phe Ile Thr  
1 5 10 15  
Arg Ile Ala Ala Asp Glu Thr Thr Asn Val Asp Asp Cys Asn Thr Glu  
20 25 30  
Asp Ser Pro Gln Ile Lys Gly Arg Lys Met Phe Leu Arg Trp Tyr Leu  
35 40 45  
Thr Lys Leu Cys Ser Asp Pro Thr Glu Met Glu Phe Trp Arg Tyr Xaa  
50 55 60  
Asn Lys Val Gly  
65

<210> 43229  
<211> 147  
<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43229

```

Pro Ser Ile Arg Val Met His Ser Gly Gln Glu Arg Arg Leu Pro Leu
1      5      10      15
Asn Ile Glu Tyr Ile His Ile Gly Val Met Leu Gly Phe Ile Gln Asp
      20      25      30
Val Phe Thr Glu Ala Phe Met Ser His Pro Thr Leu Ser Leu Gln Arg
      35      40      45
Lys Val Ala Leu Val Arg Ala Ile Gly Lys Ile Ile Trp Ile Gln Asn
      50      55      60
Asp Leu Phe Ala Lys Trp Arg Val Arg Asp Gly Glu Glu Tyr Ala Asp
65      70      75      80
Glu Met Ser Glu Ile Ile Leu Asp Asp Lys Glu Gly Tyr Ile Gly Glu
      85      90      95
Lys Lys Ile Leu Gly Asp Ser Ser Pro Ser Ala Ser Ser Ser Asp Asp
      100      105      110
Asp Arg Ser Ser Ile Ala Ser Ser Val Ala Pro Ser Ala Ala Ser Ala
      115      120      125
Cys Pro Phe Ser Asp Met Ala Arg Pro Ser Ser Glu Thr Lys Ile Trp
      130      135      140
Ala Gly Arg
145

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&lt;210&gt; 43230

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43230

```

Leu Leu Trp Ser Cys Gln Val Arg Gly Glu Asp Asn Pro Ala Tyr Asn
1      5      10      15
Ala Ser Lys Ala Ala Ile Lys Asn Leu Thr Glu His Leu Ala His Asp
      20      25      30
Leu Arg Ser Asp Pro Ala Thr Ala His Ile Ser Val His Leu Leu Ile
      35      40      45
Pro Gly Trp Thr Trp Thr Gly Leu Met Gly Asn Val Gly Pro Thr Asp
      50      55      60
Glu Ser Ser Leu Lys Lys Met Glu Gly Ala Trp Phe Pro Ser Gln Val
65      70      75      80
Ala Glu Glu Leu Val Lys Gly Met Glu Lys Gly Ser Phe Tyr Ile Val
      85      90      95
Cys Pro Asp Asn Glu Thr Asp Arg Ala Leu Asp Gln Ala Arg Met Gln
      100      105      110
Trp Ala Ser Asp Asp Val Val Glu Asp Arg Pro Ala Leu Ser Arg Trp
      115      120      125
Glu Asp Thr Trp Lys Gly Arg Ala Glu Glu Trp Ile Gln Ser Glu Ala
      130      135      140
Lys Arg Arg Arg Asp Ala Ser Asn Ser
145      150

```

&lt;210&gt; 43231

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19507

&lt;400&gt; 43231

Tyr Trp Trp Leu Cys Glu Ile Ala Tyr Cys Trp Ala Ser Val Gly Cys  
 1 5 10 15  
 Lys Val Ser Val Cys Ile Phe Leu Arg Arg Ile Thr Val Lys Arg Leu  
 20 25 30  
 His Ile Trp Ile Leu Tyr Cys Val Ile Ala Leu Thr Ala Ile Ala Gly  
 35 40 45  
 Leu Ala Phe Met Leu Ile Met Leu Leu Gln Cys Arg Pro Ile Glu Tyr  
 50 55 60  
 Phe Trp Thr Arg Thr Ala Leu Asp Pro Ser Ile Pro Gly Ser Cys Ile  
 65 70 75 80  
 Asp Ile His Ile Val Ile Ala Met Thr Tyr Val Tyr Ser Ala Phe Ala  
 85 90 95  
 Ala Leu Cys Asp Phe Thr Val Gly Ile Leu Pro Ile Phe Val Phe Thr  
 100 105 110  
 Arg Gly

&lt;210&gt; 43232

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (7)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43232

Ala Pro Ile Arg Pro Val Xaa Val Gly Glu Asp Val Arg Trp Pro Asp  
 1 5 10 15  
 Pro Ser Lys Lys Pro Val Ala Pro Gly Thr Lys Pro Gly Leu Lys Leu  
 20 25 30  
 Leu Ala Ser His Pro Glu Thr Ile Arg Ala Trp Pro Gly Gly Phe Gly  
 35 40 45  
 Tyr Ala Lys Leu Gly Ala Asn Tyr Gly Pro Ser Leu Ser Ala His Gly  
 50 55 60  
 Gln Ala Gln Ala Leu Gly Phe Asp Gln Val Leu Trp Leu Phe Gly Glu  
 65 70 75 80  
 Asp Arg Gln Val Thr Glu Ala Gly Ala Ser Asn Phe Phe Ile Ile Trp  
 85 90 95  
 Glu Asn Lys Asp Thr Gly Arg Leu Glu Leu Val Thr Ala Pro Leu Glu  
 100 105 110  
 Asn Gln Leu Ile Leu Ala Gly Val Thr Arg Arg Ser Val Leu Glu Leu  
 115 120 125  
 Ala Arg Ser Arg Leu Thr Lys Pro Val Gly Ser Leu Ala Pro Val Asp  
 130 135 140  
 Val Val Glu Lys Ala Leu Thr Ile Gly Asp Val Glu Leu Ala Trp Lys  
 145 150 155 160  
 Glu Gly Arg Val Val Glu Ala Phe Val Ser Gly Thr Ala Val Ser His  
 165 170 175  
 Ser Trp Leu Glu Asn Ala His Ser Ser Phe Arg  
 180 185

&lt;210&gt; 43233

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (68), (99), (102)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43233

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Arg | Phe | His | Gln | Asn | Leu | Lys | Pro | Leu | Leu | Asn | Arg | Glu | Pro | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Thr | Glu | Glu | Gly | Leu | Met | Ile | Glu | Arg | Met | Val | Asn | Glu | Met | Gly |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Arg | Trp | Ala | Glu | Ile | Ala | Arg | Arg | Leu | Gly | Asn | Arg | Ser | Asp | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Val | Lys | Asn | Trp | Trp | Asn | Gly | Ser | Met | Asn | Arg | Lys | Arg | Arg | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ser | Ala | Xaa | Thr | Thr | Ser | Pro | Ser | Arg | Thr | Phe | Gln | Gly | Arg | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Ala | Pro | Tyr | Pro | Arg | Ala | Ser | Thr | Ala | Leu | Gly | Ser | Pro | Ile | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Trp | Pro | Xaa | Phe | Ser | Xaa | Ser | His | Asn | Arg | Pro | Leu | Thr | Ser | Trp | Thr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asn | Ser | Ser | Ile | Gln | Thr | Arg | Arg | Glu | Ser | Ser | Ala | Ala | Ser | Val | Asp |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Cys | Pro | Arg | Gln | Leu | Ser | Pro | Ile | Tyr | Thr | Leu | Pro | Ala | Leu | Asn | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Val | Glu | Thr | Pro | Leu | Thr | Ser | Pro | Ser | Phe | Ser | Asp | Val | Ser | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Pro | Ser | Met | Val | Ser | Asp | His | Asn | Ser | Val | Ser | Ser | Ala | Ser | Pro | Arg |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Thr | Val | Ala | Ser | Ser | Val |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43234

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43234

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Asp | Arg | Pro | Ile | Arg | Thr | Phe | Asn | Thr | Ala | Val | Val | Tyr | Tyr | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Phe | Arg | Leu | Ile | His | Pro | Asp | Thr | Glu | Tyr | Asn | Tyr | Met | Val | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Pro | Cys | Leu | Asn | Leu | Gln | Trp | Lys | Tyr | Ala | Asp | Val | Thr | Gly | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Met | Arg | Leu | Gln | Leu | Leu | Tyr | Ser | Arg | His | Ala | Arg | Ser | Arg | Thr | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Arg | Ser | Pro | Gly | Arg | Leu | Tyr | Val | Leu | Arg | Thr | Thr |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     |

&lt;210&gt; 43235

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19509

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (12), (13), (15)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43235

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ala | Gly | Leu | Thr | His | Thr | Ala | Thr | Pro | Ala | Xaa | Xaa | Thr | Xaa | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | His | Met | Val | Leu | Gly | Glu | Pro | Leu | Thr | His | Ala | Ala | Leu | Val | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Arg | Asn | Gln | Asp | Gly | Ser | Leu | Ser | Thr | Val | Phe | Val | Leu | Thr | Met |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | His | Ser | Val | Cys | Asp | Arg | Trp | Ser | Val | Gly | Leu | Ile | Met | Asp | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Val | Glu | Thr | Ala | Tyr | Thr | Gly | Gln | Thr | Leu | Thr | Thr | Asn | Ser | Met | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Pro | Phe | Leu | Gln | Tyr | Ile | Gln | Gln | Leu | Gln | Gly | Gly | Asp | Ala | Phe | Trp |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Ser | Gln | Phe | Val | Gly | Val | Lys | Ala | Glu | Val | Phe | Pro | Ser | Leu | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Ser | Pro | Glu | Tyr | Thr | Pro | Thr | Pro | Thr | Glu | Thr | Ile | Asp | Leu | Ser | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Leu | Arg | Asp | Ala | Val | Pro | Gly | Gly | His | Thr | Ile | Ala | Asn | Ala | Ile |
|     | 130 |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Arg | Leu | Ala | Trp | Ala | Leu | Val | Ile | Ser | His | Tyr | Thr | Ser | Cys | Ser | Asp |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | Val | Phe | Gly | Val | Thr | Ile | Ser | Gly | Arg | Ala | Val | Pro | Val | Pro | Asp |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ile | Glu | Arg | Ile | Ile | Gly | Pro | Ile | Ile | Ala | Thr | Val | Pro | Leu | Arg | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

Arg

&lt;210&gt; 43236

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43236

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ala | Gly | Ala | Asp | Gly | Ser | Val | Leu | Trp | Arg | Glu | Glu | Met | Arg | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Cys | Thr | Met | Arg | Leu | Val | Arg | Tyr | Met | Leu | Lys | Val | Arg | Gly | Pro | His |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Met | Thr | Leu | Asn | Leu | Gln | Arg | Ile | Asp | Tyr | Val | Ser | Asp | Asn | Glu | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Asp | Ala | Glu | Lys | His | Leu | Val | Leu | Gly | Thr | Ser | Glu | Ser | Ala | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Leu | Ala | Lys | Leu | Glu | Tyr | Glu | Trp | Tyr | Thr | Asn | Asp | Glu | Ala | His |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Thr | Ala | Ala | Ile | Tyr | Ala | Ser | Arg |     |     |     |     |     |     |     |     |
|     |     |     | 85  |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43237

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43237

Leu Ser Ser Ser Ile Gln Lys Ala Ile Ala Asn Val His Val His Thr  
 1 5 10 15  
 Met Thr Glu Arg Cys His Pro Val Asp Asp Cys Ser Ala Glu Lys Met  
 20 25 30  
 Thr Ser Ala Pro Asp Thr Val Lys Glu Ala Ala Leu Leu Val Val Thr  
 35 40 45  
 Glu Gly Gln Pro Asn Ile Gln Asn Val Ser Glu Glu Glu Tyr Thr Ala  
 50 55 60  
 Met Glu Arg Arg Ile Arg Leu Lys Val Asp Met Arg Leu Cys Thr Ile  
 65 70 75 80  
 Ala Gly Ile Leu Cys Ser Leu Asn Leu Leu Asp Ser Gly Ile Leu Ser  
 85 90 95  
 Ser Ala Ser Val Thr Ser Met Phe Glu Asp Leu Asp Leu Arg Gly Ser  
 100 105 110  
 Arg Tyr Ser Val Ser Ile Phe Ile Phe Thr Ile Ala Ser Val Val Ala  
 115 120 125  
 Gln Leu Pro Cys Thr Val Ala Val Arg Val Val Gly Pro Arg  
 130 135 140

&lt;210&gt; 43238

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43238

Arg Leu Gly Thr Cys Ser Thr Ile Gly Lys Arg Thr Asn Thr Ile Leu  
 1 5 10 15  
 Gly Tyr Ser Glu Val Thr Leu Glu Trp Gln Ile Glu Asp Asp Tyr Tyr  
 20 25 30  
 Asn Thr Gly Asn Pro Lys Ser Leu Gln Ala Gly Thr Tyr Arg Phe His  
 35 40 45  
 Tyr Tyr Gly Asp Ala Lys Asn Ile Gln Gly Gln Ile Lys Ser Phe Glu  
 50 55 60  
 Gly Ile Gly Lys Pro Phe Thr Val Asn Leu Gly  
 65 70 75

&lt;210&gt; 43239

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43239

Leu Arg Ser Ser Gln Leu Val Leu Ser Asn His Ser Arg Leu Tyr His  
 1 5 10 15  
 Thr Leu Lys Thr Gly Ala Gln Leu Ala Glu Trp Ala Glu Ser Thr His  
 20 25 30  
 Ser Leu Ser His Thr Trp Asn Thr Arg Ala Glu Asn Leu Lys Thr Ala  
 35 40 45  
 Ile Asn Gln Tyr Cys Trp Asp Asp Ala Tyr Gly Ala Phe Asn Asp Asn  
 50 55 60  
 Ala Thr Ala Thr Ser Leu His Pro Gln Asp Ala Asn Ser Met Ala Leu  
 65 70 75 80  
 Leu Phe Gly Ile Val Asn Glu Thr  
 85

<210> 43240  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

<400> 43240  
 Pro Leu Asp Leu Thr Phe Gly Arg Arg Gly Glu Thr Thr Gly Ala Phe  
 1 5 10 15  
 Asp Glu Ser Gly Pro Pro Leu Ser Gln Lys Asn Ser Asp Thr Tyr His  
 20 25 30  
 Met Trp Thr Met Ile Gly Thr Tyr Asn Tyr Val Leu Phe Ser Asn Asp  
 35 40 45  
 Thr Asp Phe Leu Leu Thr Asn Trp Glu Lys Tyr Gln Ala Ala Met Asp  
 50 55 60  
 Phe Ile Tyr Gly Lys Val Asp Glu Lys Ser Gly Leu Leu Ile Val Thr  
 65 70 75 80  
 Gly Thr Arg Asp Trp Ala Arg Trp Gln Gln Gly Tyr Asn Asn Ser  
 85 90 95

<210> 43241  
 <211> 235  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (23), (220), (224)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43241  
 Val Pro Gly Pro Thr Lys Leu Asp His Gly Asn Gly Thr Ser Met Ala  
 1 5 10 15  
 Val Ala Lys Gln Ala Ser Xaa Trp Ala Cys Pro Pro Thr Ser Lys Thr  
 20 25 30  
 Gln Pro Thr Arg Ala Thr Pro Arg Gly Phe Glu Ser Pro Leu Tyr Val  
 35 40 45  
 Ile Tyr Ser Cys Ala Gly Glu Arg Val Thr Asn Ser Asn Lys Asp Gly  
 50 55 60  
 Thr Ser Phe Trp Asn Gly Gln Asn Met Glu Arg Ser Glu Leu Ile Pro  
 65 70 75 80  
 Gln Thr Thr Ala Asn Leu Gly Ser Gly His Leu Tyr Tyr His Phe Ser  
 85 90 95  
 Leu Ser Thr Lys Thr Thr Asn Ala Pro Asp Ala Ser Phe Glu His Gln  
 100 105 110  
 Ile Ala Phe Phe Glu Ser His Phe Thr Glu Leu Lys Tyr Gly Ala Ser  
 115 120 125  
 Gly Ser Ser Asp Asn Thr Leu Arg Trp Tyr Ala Asn Gly Gln Thr His  
 130 135 140  
 Trp Ser Ile Gln Leu Glu Pro Gly Asn Trp Tyr Asn Phe Ala Tyr Asp  
 145 150 155 160  
 Ile Asp Phe Ala Ser Gln Lys Val Gly Leu Trp Ala Ser Asn Gly Ser  
 165 170 175  
 Asp Pro Leu Thr Glu Val Val Ser Pro Val Ser Ala Ser Thr Phe Thr  
 180 185 190  
 Asn Ser Ala Asp Trp His Val Gly Gln Leu Arg Leu Pro Asn Arg Gly

## 19512

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 195 |     | 200 |     | 205 |     |     |     |     |     |     |     |     |     |     |
| Ala | Ser | Asn | Asp | Ala | Pro | Glu | Asp | Trp | Phe | Trp | Xaa | Gly | Ile | Trp | Xaa |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Leu | His | Asp | Trp | Lys | Trp | Lys | Val | Ser | Arg | Ser |     |     |     |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     |     |

&lt;210&gt; 43242

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43242

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Val | Leu | Gly | Arg | Met | Gly | Ser | Thr | Ser | Thr | Ser | His | Ser | Leu | Lys |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Tyr | Arg | Gly | Glu | Gly | Gln | Lys | Pro | Tyr | Ser | Ala | Arg | Asn | Ile | Gly | Ser |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Met | Val | Ala | Glu | Ala | Tyr | Arg | Thr | Leu | Leu | Tyr | Gly | Gly | Val | Phe | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Pro | Ala | Asp | Lys | Lys | Ser | Thr | Lys | Gly | Lys | Leu | Arg | Ile | Leu | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Cys | Ala | Pro | Met | Ala | Met | Leu | Phe | Glu | Asn | Ala | Gly | Gly | Leu | Ala |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ile | Asn | Ser | Arg | Ala | Glu | Arg | Leu | Leu | Glu | Val | Val | Pro | Glu | His | Ile |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| His | Asp | Arg | Ser | Gly | Val | Phe | Leu | Gly | Ser | Lys | Asp | Glu | Val | Gln | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Ile | Asp | Thr | Tyr | Asn | Lys | His | Lys | Lys |     |     |     |     |     |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     |     |     |     |

&lt;210&gt; 43243

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43243

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Cys | Arg | Leu | Cys | Cys | Lys | Lys | Gln | Met | Glu | His | Ala | Ala | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Leu | Asn | Ser | Asn | Val | Ala | Phe | Gly | Cys | Asn | Leu | Gly | Gly | Thr | Thr |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Ile | Ser | Cys | Leu | Val | Ser | Gln | Thr | Asp | Ser | Thr | Thr | Thr | His | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Ala | Thr | Ala | Met | Ile | Thr | Asp | Ile | Gly | Ser | Phe | Phe | Leu | Pro | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Val | Val | Thr | Gly | Thr | Ala | Thr | Ala | Gly | Ala | His | Ala | Thr | Thr | Gly | Ala |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Val | Thr | Gly | Ala | Thr | Pro | Ser | Ala | Thr | Gly | Gln | Thr | Thr | Leu | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Thr | Ser | Gly | Pro | Ser | Val | Thr | Ser | Gly | Pro | Gln | Ala | Thr | Gly | Ser | Ser |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Ala | Ser | Ala | Ser | Ala | Thr | Pro | Ser | His | Ser | Ser | Gln | Arg | Lys | Ser | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | Ser | Pro | Asn | Ile | Thr |     |     |     |     |     |     |     |     |     |     |
|     |     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43244

&lt;211&gt; 91



&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43244

```

Thr Arg Thr Phe Gln Pro Arg Gly Glu Asp Val Trp Tyr Gln Phe Glu
1          5          10          15
Tyr Pro Ala Leu Thr Arg Asp Ser Ala Ala Arg Ser Ser Pro Val Leu
          20          25          30
Ser Ile Leu Lys Val Asp Pro Thr Leu Thr Asp Ala Asp Gly Asn Phe
          35          40          45
Leu Asp Glu Gly Thr Val Met Trp Thr Pro Ala His Gly Pro Ser Pro
          50          55          60
Asn Ala Pro Leu Gly Asp Gly Tyr Ser Phe Thr Tyr Gln Gly Glu Leu
65          70          75          80
Ala Arg Val Cys Phe Arg Gly Asn Val Leu Asn
          85          90

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&lt;210&gt; 43245

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (17), (29), (50), (53), (54)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43245

```

Leu Leu Leu Phe Glu Ile Pro Ala Arg Asn Ser Ile Gly His Gly Val
1          5          10          15
Xaa Ser Ser Ile Leu Glu Asp Arg Leu Asn Gly Ile Xaa Ala Met Ala
          20          25          30
Arg Val Ser Arg Gly Gln Leu Cys Ser Val Thr Cys Lys Ser Val Val
          35          40          45
Arg Xaa Gly Pro Xaa Xaa Val Gln Ala Val Gln Pro
          50          55          60

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&lt;210&gt; 43246

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43246

```

Ser Asp Cys Lys Tyr Tyr Thr Tyr Gln Leu Asn Ser Leu Pro Leu Ser
1          5          10          15
Ser Leu Leu Phe Arg Ser Ile Ser Arg Leu Leu Pro Ser Lys Met Glu
          20          25          30
Thr Ser Leu Arg Asp Lys Val Ala Ile Val Ser Gly Ser Ser Ser Gly
          35          40          45
Ile Gly Ala Ala Ile Val Arg Glu Leu Ser Ser Arg Gly Ala Asn Thr
          50          55          60
Val Val Asn Tyr Pro Phe Pro Ser Leu Arg Ala Glu Ala Asp Thr Leu
65          70          75          80
Val Ala Ser Leu Pro Ser Pro Ala Ile Ala Val Lys Ala Asp Met Ser
          85          90          95
Arg Ala Asp Ala Pro Gln Lys Leu Val Asp Ala Ala Val Ser Gln Trp

```

## 19514

Gly 100 105 110

<210> 43247  
 <211> 270  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (181), (183), (204)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43247  
 Arg Ser Thr Gly Gly Val Leu Thr Phe Glu Ser Phe Ala Arg Asp Phe  
 1 5 10 15  
 Arg Tyr Ser Pro Ala Asp Lys Thr Arg Val Ser Ser Ile Ala Val Gly  
 20 25 30  
 Ile Gln Gln Ala Gly Ala Leu Val Gly Cys Phe Ala Val Trp Pro Val  
 35 40 45  
 Thr Asn Arg Trp Gly Arg Arg Leu Ala Met Met Ala Cys Ser Ala Val  
 50 55 60  
 Phe Cys Val Gly Val Ile Leu Glu Val Ile Asn Ala His Ser Leu Ala  
 65 70 75 80  
 Leu Phe Tyr Ala Gly Arg Val Ile Cys Gly Leu Gly Ile Gly Gly Ser  
 85 90 95  
 Ala Thr Val Ile Pro Ile Tyr Met Ala Glu Met Ser Pro Lys Glu Ser  
 100 105 110  
 Arg Ala Arg Leu Gly Ser Cys Tyr Gln Phe Thr Tyr Thr Ile Gly Ile  
 115 120 125  
 Leu Val Ser Tyr Trp Ile Asp Tyr Ala Val Lys Phe Met Pro Pro Ser  
 130 135 140  
 Pro Ala Gln Trp Gln Ile Pro Ile Ala Leu Gln Leu Val Pro Gly Ala  
 145 150 155 160  
 Leu Met Gly Leu Gly Thr Ser Thr Leu Pro Glu Ser Val Arg Trp Leu  
 165 170 175  
 Leu Ala Arg Gly Xaa His Xaa Arg Ala His Ser Ser Leu Leu Trp Ile  
 180 185 190  
 Arg Ala Ser Ser Pro Asn Ser Pro Ala Leu Ser Xaa Glu Phe Ser His  
 195 200 205  
 Met Arg Leu Gly Leu Glu Gln Glu Arg Asn Arg Thr Ala Asn Phe His  
 210 215 220  
 Pro Arg Asn Ser Leu Ala Gly Pro His Ala Arg Arg Leu Leu Leu Gly  
 225 230 235 240  
 Phe Gly Leu Phe Leu Ala Gln Gln Ser Gln Ala Pro Pro Ala Leu Pro  
 245 250 255  
 Thr Leu Ala Gln Ser Phe Phe Pro Ser Gly Gly Asn Gly Gln  
 260 265 270

<210> 43248  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<220>

## 19515

&lt;221&gt; UNSURE

&lt;222&gt; (1),(2),(3),(4),(5),(6),(7),(8),(9),(10),(11)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43248

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Lys | Thr | Ala | Asp | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Thr | Lys | Phe | Phe | His | Leu | Phe | Ile | Gln | Lys | Gln | Leu | His | Arg | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Phe | Pro | Tyr | Ile | Leu | Phe | Pro | Phe | Leu | Ala | His | Phe | Phe | Ile | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Leu | Arg | Ile | Cys | Cys | Phe | Ala | Gly | Gln | Asp | Ser | Gly | Ala | Gly | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Gln | Ala | Ser | Thr | Pro | Arg | Gly | Ile |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43249

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43249

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ala | Cys | Ser | Ala | Cys | Ala | His | Pro | Ser | Ala | Pro | Val | Val | Lys | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Thr | Pro | Lys | Val | Lys | Gly | Ser | Ser | Lys | Phe | Ile | Ala | Pro | Leu | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Thr | Glu | His | Thr | Pro | Phe | His | Lys | Tyr | Ser | Val | Leu | Arg | Pro | Phe | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Glu | Ala | Asp | Glu | Gln | Pro | Leu | Thr | Val | Val | Val | Thr |     |     |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43250

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (191),(192),(193),(194),(195),(196),(197),(198),(199),(200)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43250

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gln | Val | Thr | Glu | Asn | Phe | Gly | Leu | Asn | Glu | Val | Asp | Leu | Val | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Met | Pro | Met | Ala | Asp | Thr | Pro | Ala | Ala | Leu | Ser | Thr | Glu | Leu | Leu | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Gln | Arg | Gln | Gly | Leu | Ala | Trp | Met | Ile | Glu | Lys | Glu | Cys | Pro | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Pro | Gly | Pro | Gly | Ser | Gln | Asn | Val | Val | Gln | Leu | Trp | Lys | Arg | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Gly | Asn | Arg | Phe | Thr | Asn | Ile | Ala | Thr | Asn | Tyr | Ser | Thr | Ala | Ile | Pro |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Pro | Pro | Leu | Ala | Ser | Gly | Gly | Ile | Leu | Ala | Asp | Asp | Met | Gly | Leu | Gly |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Lys | Thr | Ile | Gln | Ile | Ile | Ser | Leu | Ile | Leu | Ala | Asn | Pro | Gln | Pro | Asn |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

## 19516

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Pro | Glu | Ser | Ser | Lys | Thr | Thr | Leu | Ile | Ile | Ala | Pro | Val | Gly | Val |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Met | Ser | Asn | Trp | Arg | Asn | Gln | Ile | Lys | Asp | His | Thr | His | Ser | Glu | Ser |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Thr | Pro | Ser | Val | Leu | Ile | Tyr | His | Gly | Thr | Gly | Lys | Lys | Glu | Ala | Ala |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |     |
| Lys | Leu | Asp | Glu | Tyr | Asp | Val | Val | Ile | Thr | Ser | Tyr | Gly | Ala | Leu | Ala |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Val | Glu | Tyr | Asp | Pro | Ser | Ala | Lys | Ala | Ala | Pro | Ser | Leu | His | Xaa | Xaa |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Lys |     |     |     |     |     |     |
|     |     | 195 |     |     |     |     |     | 200 |     |     |     |     |     |     |     |

&lt;210&gt; 43251

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (6), (279), (280), (281), (282), (283), (284), (285), (286), (287)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43251

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Arg | Gly | Ser | Xaa | Xaa | Pro | Trp | Ile | Phe | Gly | Met | Val | Phe | Leu | Ala |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Asp | Thr | Lys | Thr | Gly | His | Asp | Val | Ala | Ile | Lys | Cys | Leu | Thr | Lys |
|     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |     |
| Ala | Pro | Ser | Asp | Asp | Pro | Ser | Ala | Pro | Ser | Ala | Ile | Asp | Asp | Arg | Phe |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Glu | Glu | Leu | Tyr | Cys | His | Lys | Arg | Leu | Ala | His | His | Pro | Asn | Ile | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Leu | Ile | His | Ser | Phe | Glu | Thr | Glu | Thr | His | Leu | Tyr | Leu | Val | Leu |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Glu | Tyr | Cys | Ala | Asn | Gly | Asp | Leu | Tyr | Glu | Ala | Ile | Arg | Leu | Asn | Arg |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Pro | Leu | Glu | Thr | Glu | His | Val | Arg | Asp | Phe | Met | Leu | Gln | Leu | Val |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Ala | Val | Glu | Phe | Leu | His | Ser | Asn | Gly | Met | Tyr | His | Arg | Asp | Ile |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Pro | Glu | Asn | Ile | Phe | Leu | Thr | Gln | Asp | Gly | Thr | Met | Lys | Leu | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Phe | Gly | Leu | Ala | Thr | His | Ala | Pro | Trp | Cys | His | Glu | Ala | Cys | Val |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |     |
| Gly | Ser | Asp | Arg | Tyr | Met | Ala | Pro | Glu | Gln | Tyr | Asp | Pro | Gly | Ala | Asn |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Tyr | Ser | Pro | Ala | Lys | Ala | Asp | Ile | Trp | Ala | Ile | Gly | Ile | Cys | Leu |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Leu | Asn | Val | Leu | Phe | Ala | Arg | Asn | Pro | Phe | Ala | Thr | Pro | Thr | Glu | Ser |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Asp | Ile | Leu | Phe | Ala | Asp | Tyr | Val | Arg | Asp | Arg | Gln | Ser | Leu | Phe | Asp |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Phe | Thr | Asn | Met | Ser | Gln | Asp | Thr | Phe | Glu | Ile | Leu | Arg | Ile | Ala |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     | 240 |     |
| Leu | Ala | Ile | Asp | Pro | Glu | Lys | Arg | Ser | Leu | Ala | Gly | Val | Arg | Asp | Ala |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |

## 19517

Leu Leu Arg Val Val Ser Phe Thr Thr Asp Asp Glu Val Leu Asp Asp  
                   260                                  265                                  270  
 Phe Cys Thr Asp Gly Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly  
                   275                                  280                                  285  
 Val

&lt;210&gt; 43252

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (36), (192), (193), (194), (195), (196), (197), (198), (199), (200), (201), (202)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43252

Met Gln Glu Pro Thr Trp Asp Tyr Phe Ser Tyr Val Arg Ser Pro Met  
 1                  5                                  10                                  15  
 Gln Ala Lys Gln Glu Thr Glu Leu Met Ser Pro Glu Asn Pro Ala Gly  
                   20                                  25                                  30  
 Pro Ala Thr Xaa Leu Val Phe Ala Leu Tyr Asn Ile Gly Ser Ile Pro  
                   35                                  40                                  45  
 Ala Val Val Leu Ser Gly Pro Val Asn Asp Tyr Leu Gly Arg Arg Ala  
                   50                                  55                                  60  
 Gly Met Phe Thr Gly Ala Val Ile Ile Ile Ile Gly Thr Cys Ile Gln  
 65                  70                                  75                                  80  
 Ala Pro Ser Val Asn His Gly Met Phe Met Ala Gly Arg Phe Ile Leu  
                   85                                  90                                  95  
 Gly Phe Gly Val Ser Phe Cys Cys Val Ser Ala Pro Cys Tyr Val Ser  
                   100                                  105                                  110  
 Glu Met Ala His Pro Ala Trp Arg Gly Thr Leu Thr Gly Leu Tyr Asn  
                   115                                  120                                  125  
 Cys Thr Trp Tyr Ile Gly Ser Ile Val Ala Ser Trp Val Ser Tyr Gly  
                   130                                  135                                  140  
 Cys Ala Ser Ile Lys Ser His Val Gly Phe Arg Ile Pro Ile Trp Cys  
 145                  150                                  155                                  160  
 Gln Leu Val Ser Ser Val Ile Val Ala Val Gly Val Trp Phe Leu Pro  
                   165                                  170                                  175  
 Glu Ser Pro Arg Trp Leu Met Ala Gln Asp Arg Val Glu Ser Ser Xaa  
                   180                                  185                                  190  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr  
                   195                                  200

&lt;210&gt; 43253

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43253

Leu Gly Asn Glu His Glu Val Gly Gln Gly Ile Lys Asp Ser Gly Val  
 1                  5                                  10                                  15  
 Pro Arg Glu Asn Ile Phe Ile Thr Ser Lys Leu Trp Asn Thr His Gln  
                   20                                  25                                  30  
 Pro Asn Val Ala Glu Gly Leu Gln Lys Thr Leu Asp Ala Leu Gly Thr

## 19518

35 40 45  
 Asp Tyr Leu Asp Leu Tyr Val Asn Pro His His Ser Pro Leu Val Arg  
 50 55 60  
 Arg Gly Thr Ala Ala Arg Ser Ala Arg Leu Thr Leu Thr Ser Ala His  
 65 70 75 80  
 Pro Leu Ala Ser Pro Thr Ser Ser Cys Arg Pro Ala Thr Pro Ala Val  
 85 90 95  
 Phe His Pro

&lt;210&gt; 43254

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43254

Val Thr Val Leu Ser Arg Pro Thr Ile Ser Ser Asp Phe Cys Leu Lys  
 1 5 10 15  
 Thr Ser Ser Leu Thr Thr Tyr Ile Arg Leu His Pro Phe Ala Arg Val  
 20 25 30  
 Ala Glu Trp Leu Phe Asn Glu Asp Val Ile Lys Ala Ile Phe Ala Thr  
 35 40 45  
 Ala Gln Gln Asp Ala Ser Glu Val Ala Asn Ala Ala Ser Asp Ser Ile  
 50 55 60  
 Leu Ile Gln Cys Leu Val Lys Ser Ile Glu Val Met Asp Leu Met Leu  
 65 70 75 80  
 Asp Leu Gln Ser Thr Tyr Phe His Ile Val Arg Pro Ser Ile Lys Ser  
 85 90 95  
 Gln Ala Gly Gly Ser Arg Ile Asn Val Ala Asn Ser Ser Leu Ser Ser  
 100 105 110  
 Phe Glu Asp Ser Ile Leu Asn Asn Leu Thr Ile Ile Pro Ala Leu Ser  
 115 120 125  
 Leu Tyr Cys Gly Ala Gly His Glu Gln Leu Thr Val Thr Ser Met Ala  
 130 135 140  
 Leu Leu Glu Lys Met Ser Ser Ser Arg Lys Leu Asn Lys Leu Ser Ser  
 145 150 155 160  
 Pro Glu Ile Ser Asn Trp Gln Ser Ser Asn Lys Ile Val Glu Val Leu  
 165 170 175  
 Ser Thr Glu Val Asp Val Asp Thr Gly Ser Arg Pro Val Phe Thr Lys  
 180 185 190  
 Gly Gly Glu Gly Ser Ala Leu  
 195

&lt;210&gt; 43255

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43255

Asp Thr Ser Arg Asp Ser Arg Lys Gln Arg Glu Glu Gly Ala Cys Thr  
 1 5 10 15  
 Ser Val Thr Gln Thr Leu Ile Ile Asp Pro Thr Leu Ile Ile Tyr Lys  
 20 25 30  
 Val Asp His His Trp Ala Ala Gln Asp Leu Phe Thr Thr Tyr Asn Val  
 35 40 45  
 Cys Glu Thr Ser Arg Leu Ser Leu Ser Ile Arg Arg

## 19519

50

55

60

&lt;210&gt; 43256

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (32)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43256

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gly | Ser | Asn | Ile | Leu | Ile | Leu | Arg | Ala | Met | Gly | Lys | Ile | Gln | Asp |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Thr | Arg | Ala | Ser | Ile | Lys | Tyr | Arg | Leu | Arg | Glu | Phe | Ser | Pro | Tyr | Xaa |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Ile | Tyr | Gly | Gly | Arg | Val | Val | Asn | Leu | Phe | Asn | Phe | Ser | Ala | Leu | Leu |
|     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |
| Leu | Gln | Leu | Arg | Gly | Asn | Ser | Ile | Arg | Glu | Phe | Gln | Ala | Phe | Cys |     |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43257

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (57), (63), (64), (65), (66)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43257

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Thr | Asn | Leu | Glu | Tyr | Gln | Val | His | Val | Arg | Leu | Phe | Glu | Arg | Ala |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| His | Lys | Gly | Gly | Glu | Ser | Gly | Ala | Tyr | Ser | Ile | Gly | Pro | Arg | Ser | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Glu | Leu | Arg | Pro | Gly | Thr | Phe | Lys | His | Ala | Tyr | Ile | Gly | Asp | Ser | Leu |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ser | Phe | Ile | Val | Phe | Thr | Ala | Gly | Xaa | His | Gly | Leu | Gln | Phe | Xaa | Xaa |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Xaa | Xaa | Gly | Pro |     |     |     |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43258

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (87), (92)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43258

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Tyr | Ala | Gly | Asp | Ile | Ser | Leu | Tyr | Pro | Ala | Ala | Leu | Thr | Val | Arg |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

## 19520

```

1           5           10           15
Thr Ile Lys Ala Val Phe Pro Ser Cys Arg Ile Phe Arg Glu Asp Ala
      20           25           30
Ala Ala Asp Ala Lys Leu Asp Phe Thr Asn Met Val Ile Phe Cys Lys
      35           40           45
Lys Ser Asn Thr Pro Leu Arg Phe Arg Asp Pro Val Lys Ala Asp Phe
      50           55           60
Leu Gly Ser Lys Ser Arg Gln His Tyr Leu Val Pro Lys His Glu Ser
      65           70           75           80
Ser Pro Arg Gly Trp Lys Xaa Ala Leu His Tyr Xaa
      85           90

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&lt;210&gt; 43259

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43259

```

Leu Asp Phe Leu Ser Gly Leu Gly Val Gly Thr Thr Pro Ala Ala Leu
1           5           10           15
Ile Thr His Gly Ile Glu Thr Thr Ile Val Glu Ile Asp Pro Val Val
      20           25           30
His Lys Phe Ala Met Glu Tyr Phe His Leu Pro Ser Ser His Ile Ala
      35           40           45
Ala Ile Glu Asp Ala Ser Val Phe Val Lys Arg Ala Gln Glu Ser Pro
      50           55           60
Asn Pro Ala Gln Tyr Asp Tyr Ile Val His Asp Val Phe Thr Gly Gly
      65           70           75           80
Ala Glu Pro Val Glu Leu Phe Thr Ile Glu Phe Ile Lys Gly Leu Tyr
      85           90           95
Asp Leu Leu Lys Glu Asp Gly Val Ile Ala Ile Val Arg Pro Ala Pro
      100           105           110
Pro Leu Leu Thr Pro Ser Pro His Asp
      115           120

```

&lt;210&gt; 43260

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43260

```

Leu Pro Arg Pro His Lys Ser Ala Thr Gly Leu Ala Pro Gly Thr Pro
1           5           10           15
Thr His Ile Leu Gly Pro Arg Glu Arg Pro Asp Thr Arg Pro Arg Pro
      20           25           30
Arg Pro Pro Ala Arg Leu Leu Phe Thr Arg Gly Leu Cys Lys Gln Ile
      35           40           45
Met Leu Ser Phe Ser Ser Pro Arg Phe Pro Gly Leu Ala Leu Leu Phe
      50           55           60
Ser Arg Ser Ser Leu Leu Pro Ser Glu Pro Pro Pro Gln Pro Ser
      65           70           75           80
Thr His Ser Val Gln Thr Ile Phe Ser Cys Leu Ser Ser Leu Pro Pro
      85           90           95
Pro Ser Pro Pro Pro Pro Pro Pro Pro Pro Leu His Pro His Leu Pro
      100           105           110
Pro Pro Ser Asn Pro Pro Leu Leu Leu Pro Arg Phe Thr Ala Leu Lys

```



## 19521

115  
Ile Ser Pro Pro Ala  
130

120

125

<210> 43261  
<211> 164  
<212> PRT  
<213> A.fumigatus

<400> 43261  
Pro Pro Ser Ser Pro Pro Arg Ala Ala Thr Pro Arg Ser Ser Pro Pro  
1 5 10 15  
Pro Pro Pro Leu Gly Thr His Arg Ala Ser Val Pro Ser Ile Val Arg  
20 25 30  
Arg Gln Ser Thr Pro Gly His Phe Asp Pro Ala Gly Pro Ser Arg Leu  
35 40 45  
Ala Gly Ala Pro Pro Pro Pro Pro Leu Ala Pro Pro Pro Pro  
50 55 60  
Ala Pro Pro Arg Arg Pro Pro His His Pro Cys Arg Pro Leu Gly Leu  
65 70 75 80  
Ala Ala Ala Pro Ser Pro Ala Arg Pro Ser Pro Gly Thr Gln Val Arg  
85 90 95  
Pro Ser Leu Phe Pro Gly Gln His Phe Ser Pro Pro Arg Pro Pro Pro  
100 105 110  
His Ser Pro Pro Pro Pro Pro Pro Pro Thr Ala Pro Pro Pro Leu Pro  
115 120 125  
Arg Pro Pro Pro Thr Ala Asp Leu Ser Gln Asn Gln Pro Phe Arg Pro  
130 135 140  
Pro Pro Pro Pro Pro Pro Pro Pro Pro Ser Pro Pro Pro His Pro  
145 150 155 160  
Pro Pro Pro Pro

<210> 43262  
<211> 174  
<212> PRT  
<213> A.fumigatus

<400> 43262  
Ser Thr Asp Thr Glu Pro Arg Lys Cys Asn Pro Pro Pro Leu Pro His  
1 5 10 15  
Ala Pro Pro Pro Pro Ala Pro Pro Pro Pro Pro Pro Leu Trp Gly Pro  
20 25 30  
Thr Glu Arg Ala Tyr Leu Arg Ser Ser Gly Asp Ser Pro His Gln Val  
35 40 45  
Ile Ser Thr Pro Leu Gly Pro Val Gly Ser Leu Ala Pro Pro Pro Pro  
50 55 60  
Pro Leu Pro Ser Pro Pro Pro Pro Pro Pro Pro Arg Ala Ala Pro  
65 70 75 80  
Pro Ile Thr Arg Ala Asp Pro Leu Asp Ser Gln Arg Arg Pro Pro Pro  
85 90 95  
Pro Gly Leu Arg Gln Glu Pro Lys Cys Ala Pro Pro Cys Ser Leu Asp  
100 105 110  
Ser Ile Ser Pro Pro Arg Asp Pro Pro Pro Thr Pro Pro Pro Pro Arg  
115 120 125  
Pro Pro Pro Pro Pro Arg Pro Pro Ser Pro Ala Pro Pro Pro Leu Arg

## 19522

130 135 140  
 Thr Phe Pro Arg Ile Asn Leu Ser Ala Pro Pro Pro Pro Arg Pro Pro  
 145 150 155 160  
 Pro Arg Pro Pro Pro Pro Pro Pro Thr Pro Pro Pro Pro Pro  
 165 170

<210> 43263  
 <211> 183  
 <212> PRT  
 <213> A.fumigatus

<400> 43263  
 Gly Gly Gly Gly Gly Val Gly Gly Gly Gly Gly Gly Arg Gly Gly Gly  
 1 5 10 15  
 Arg Gly Gly Gly Gly Ala Glu Arg Leu Ile Leu Gly Lys Val Arg Ser  
 20 25 30  
 Gly Gly Gly Ala Gly Glu Gly Gly Arg Gly Gly Gly Gly Arg Gly  
 35 40 45  
 Gly Gly Gly Val Gly Gly Gly Ser Arg Gly Gly Glu Met Leu Ser Arg  
 50 55 60  
 Glu Gln Gly Gly Ala His Leu Gly Ser Trp Arg Arg Pro Gly Gly Gly  
 65 70 75 80  
 Gly Arg Arg Cys Glu Ser Lys Gly Ser Ala Arg Val Met Gly Gly Ala  
 85 90 95  
 Ala Arg Gly Gly Gly Gly Gly Gly Gly Gly Glu Gly Arg Gly Gly Gly  
 100 105 110  
 Gly Gly Ala Ser Glu Pro Thr Gly Pro Ser Gly Val Glu Met Thr Trp  
 115 120 125  
 Cys Gly Leu Ser Pro Asp Asp Arg Arg Tyr Ala Arg Ser Val Gly Pro  
 130 135 140  
 Gln Arg Gly Gly Gly Gly Gly Gly Ala Gly Gly Gly Gly Ala Trp Gly  
 145 150 155 160  
 Arg Gly Gly Gly Leu His Phe Leu Gly Ser Val Ser Val Asp Gln Arg  
 165 170 175  
 Gln Trp Pro Leu Leu Gln Leu  
 180

<210> 43264  
 <211> 173  
 <212> PRT  
 <213> A.fumigatus

<400> 43264  
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Arg Gly Ala Gly Gly Gly  
 1 5 10 15  
 Ala Gly Gly Gly Gly Gly Gly Lys Val Asp Ser Gly Lys Gly Pro Gln  
 20 25 30  
 Trp Gly Gly Gly Gly Gly Gly Gly Ala Gly Arg Trp Gly Gly Ala Gly  
 35 40 45  
 Gly Gly Gly Ser Gly Gly Gly Val Ala Gly Gly Arg Asn Ala Val Gln  
 50 55 60  
 Gly Thr Gly Arg Gly Ala Leu Gly Phe Leu Ala Lys Ala Gly Arg Gly  
 65 70 75 80  
 Arg Ala Pro Leu Arg Val Gln Gly Val Gly Thr Gly Asp Gly Gly Gly  
 85 90 95  
 Gly Ala Gly Gly Arg Gly Gly Gly Gly Gly Arg Gly Glu Gly Gly Gly

## 19523

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |     |
| Gly | Gly | Arg | Gln | Arg | Ala | Tyr | Trp | Ala | Gln | Arg | Gly | Arg | Asn | Asp | Leu |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Trp | Thr | Val | Ala | Gly | Arg | Ser | Lys | Val | Arg | Ser | Leu | Gly | Gly | Ser |
|     | 130 |     |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Pro | Glu | Gly | Gly | Gly | Gly | Gly | Arg | Ser | Gly | Gly | Trp | Arg | Arg | Val | Gly |
| 145 |     |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |
| Glu | Arg | Arg | Gly | Val | Thr | Phe | Ser | Arg | Leu | Gly | Val | Cys |     |     |     |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     |     |     |

&lt;210&gt; 43265

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43265

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Pro | Asp | Gly | Gly | Cys | Gln | Pro | Gly | Thr | Thr | Pro | Leu | Leu | Pro | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Leu | Ser | His | Trp | Thr | Asn | Ala | Leu | Ser | Phe | Gln | Val | Trp | Ser | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Glu | Ala | Ile | Glu | Trp | Met | His | Gln | Leu | Ala | Glu | Phe | Lys | Pro | Trp |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Phe | Ile | Glu | Glu | Pro | Thr | Ser | Pro | Asp | Asp | Ile | Leu | Gly | His | Ala | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Ile | Lys | Lys | Ala | Leu | Glu | Asn | Thr | Pro | His | Gly | Thr | Ile | Gly | Val | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Thr | Gly | Glu | Met | Cys | Gln | Asn | Arg | Val | Val | Phe | Lys | Gln | Leu | Leu | Gln |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Thr | Gly | Ala | Leu | Thr | Val | Leu | Gln | Phe | Ser | Thr | Arg | Arg | Ser | Lys | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Cys | Asn |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 115 |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43266

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43266

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Tyr | Ser | Glu | Asp | Lys | Leu | Arg | Ala | Leu | Leu | Lys | Glu | Ser | Val | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Gly | Tyr | Lys | His | Phe | Lys | Leu | Lys | Val | Gly | Ala | Asn | Val | Glu | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Arg | Arg | Arg | Leu | Thr | Ile | Ala | Arg | Glu | Ala | Ile | Gly | Tyr | Asp | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Asn | Ile | Leu | Met | Val | Asp | Ala | Asn | Gln | Val | Arg | Leu | His | Ser | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Leu | Ile |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43267

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43267

## 19524

Phe Thr Pro Asp Asp Ser Asn Arg Ser Ile Ser Leu Val Tyr Gly Asp  
 1 5 10 15  
 Ser Asn His Ser Lys Asn Thr Tyr Asp Asn Gln Gly Leu Pro Arg Phe  
 20 25 30  
 Trp Met Asp Asn Ser Met Tyr Phe Leu Cys Glu Tyr Thr Pro Thr Leu  
 35 40 45  
 Phe Phe Cys Ser Tyr Gly Pro Asp Ile Met Tyr Glu Phe Ser Ile Ser  
 50 55 60  
 Leu Ser Ile  
 65

&lt;210&gt; 43268

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43268

Gly Ala Phe Asp Ala Leu Pro Pro Leu Val Lys Thr Leu Thr Tyr Val  
 1 5 10 15  
 Leu Gly Gly Ile Ser Glu Ile Phe Ala Ser Val Thr Ser Leu Glu Tyr  
 20 25 30  
 Ala Phe Thr Lys Ala Pro Lys Asn Met Arg Ser Leu Val Gln Ala Val  
 35 40 45  
 Ala Leu Phe Met Asn Ala Phe Ser Ser Ala Leu Gly Gln Ala Leu Val  
 50 55 60  
 Ser Leu Ser Glu Asp Pro Leu Leu Val Trp Asn Tyr Thr Val Val Ala  
 65 70 75 80  
 Ile Leu Ala Phe Val Gly Gly Ile Gly Phe Trp Leu Thr Asn Tyr Lys  
 85 90 95  
 Leu Asp Lys Gln Glu Asp Ala Leu Asn Asn Leu Pro Ala Ser Arg Tyr  
 100 105 110  
 Gly Gly Asp Asn Pro Asp Pro Lys Leu Asp Glu Glu Ser Val Arg Gln  
 115 120 125

&lt;210&gt; 43269

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43269

Thr Gln Met Arg Ser Leu Gln Pro Pro Val Lys Thr Arg Met Ile Tyr  
 1 5 10 15  
 Tyr Arg Arg Asn Met Ser Ser Asn Ala Met Leu Pro Ile Arg Lys Ser  
 20 25 30  
 Asn Pro Thr Pro Gln Ala Met Tyr Thr Ile Pro Pro Ser Pro Lys Thr  
 35 40 45  
 Leu Pro Ala Pro Tyr Ser Ala Ala Ala Leu Arg Ala Ser Ala Pro Tyr  
 50 55 60  
 Ser Pro Ala Arg Cys Ser Ser Leu Ser Ser Lys Arg Pro Ser Pro Ala  
 65 70 75 80  
 Ala Arg Tyr Thr Pro Pro Ala Ser Thr Asp Ala Thr Gln Ala Ser Ala  
 85 90 95  
 Gly Gly Arg Arg Ser Pro Gly Ala Ile Ser Arg His Ser Cys Thr Lys  
 100 105 110  
 His Thr Thr Ala Leu Ala Ile Ser Pro Thr His Leu Arg Gln Ser Val  
 115 120 125

Arg Glu Glu  
130

<210> 43270  
<211> 86  
<212> PRT  
<213> A.fumigatus

<400> 43270  
Leu Arg Asn Asp Ile Ile Ser Phe Asp Gln Asn Arg Lys Arg Ile Val  
1 5 10 15  
Ser Thr Phe Trp Thr Phe Asp His Ile Thr Tyr Leu Lys Ser Ala Phe  
20 25 30  
Asp Leu Ile His Arg Ser Asn Asn Arg Asn Thr Gln Val Tyr Lys Met  
35 40 45  
Ile Gly Ser Leu Phe Phe Ile Phe Asn Arg Leu Val Glu Ile Val Phe  
50 55 60  
Leu Ile Pro Ile Ile Gly Met Met Val Ser Ile Tyr Thr Cys Leu Ala  
65 70 75 80  
Tyr Ala Phe Pro Gly Ser  
85

<210> 43271  
<211> 162  
<212> PRT  
<213> A.fumigatus

<400> 43271  
Leu Val Gly Thr Val Ser Gly Thr Tyr Trp Ala Thr Cys Thr Pro Val  
1 5 10 15  
Ala Ala Glu Ile Leu Gly Leu Arg Asp Leu Pro Ser Gly Leu Ser Ile  
20 25 30  
Thr Trp Leu Met Leu Val Pro Pro Thr Thr Val Ser Glu Ala Ile Ala  
35 40 45  
Leu Leu Leu Arg Asp Asn Lys Ser Ala Asp Ser Lys Tyr Leu Lys Val  
50 55 60  
Gln Ile Phe Thr Gly Phe Met Tyr Ile Gly Ser Ala Leu Cys Leu Trp  
65 70 75 80  
Leu Val Arg Gly Trp Lys Val Gly Asp Leu Ala Arg Ala Lys Glu Glu  
85 90 95  
Ala Val Ala Ala Val Asp Thr Arg Gln Ala Gly Asp Cys Ala Ala Gly  
100 105 110  
Ser Ala Pro Ser Ala Gly Val Ala Glu Asp Ala Glu Thr Glu Lys Gln  
115 120 125  
Gly Gln Thr Val Asp Pro Ala Phe Ser Met His Thr Ala Ser Asn Arg  
130 135 140  
Asn Pro Trp Thr Pro Ala Thr Leu Leu Arg Gly Met Val Ala Leu Lys  
145 150 155 160  
Arg Val

<210> 43272  
<211> 113  
<212> PRT  
<213> A.fumigatus

## 19526

&lt;400&gt; 43272

Arg Leu Leu Ala Ile Gln Glu Lys Gly Val Ser Ala Trp Glu Phe Gln  
 1 5 10 15  
 Pro Glu Leu Glu Ile Ala Asn Cys Phe Val Glu Gly Arg Thr Glu Ile  
 20 25 30  
 Glu Phe Tyr Asp Ser Glu Cys Ser Val Gln Thr Asn Leu Pro Val Pro  
 35 40 45  
 Lys Gln Asn Asp Val Tyr Tyr Trp Glu Ala Lys Ile Tyr Glu Lys Pro  
 50 55 60  
 Glu Ser Thr Leu Ile Ser Ile Gly Met Thr Thr Lys Pro Tyr Pro Leu  
 65 70 75 80  
 Phe Arg Leu Pro Gly Met Ser Met Ser Glu Tyr Ser Thr Leu Val Leu  
 85 90 95  
 Leu His Ser Cys Cys Cys Ser Cys Cys Cys Ser Cys Cys Cys Ser Cys  
 100 105 110  
 Cys

&lt;210&gt; 43273

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43273

Phe Ser Cys Thr Pro Val Ala Ala Pro Val Ala Ala Pro Val Ala Ala  
 1 5 10 15  
 Pro Val Ala Asn Thr Ile Ser Pro Phe Thr Gly Phe His Lys Thr Ser  
 20 25 30  
 Val Ala Tyr Leu Ser Thr Gly His Arg Arg Tyr Asn Gln Pro Phe Ser  
 35 40 45  
 Ala Ser Pro Tyr Gly Pro Ala Leu Ala Gln Gly Asp Val Val Gly Val  
 50 55 60  
 Gly Tyr Arg Pro Arg Ser Gly Thr Ile Phe Phe Thr Arg Asn Gly Lys  
 65 70 75 80  
 Lys Leu Glu Asp Val Val His Gly Ala Lys Thr Gln Asn Phe Phe Pro  
 85 90 95

&lt;210&gt; 43274

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (64)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43274

His Thr Val Pro Ser Asp Ser Trp Glu Met Ile Ile Gly Gly Tyr Pro  
 1 5 10 15  
 Val Arg Tyr Val Val Arg Phe Gly Lys Gln Gly Tyr Gln Met Lys Ile  
 20 25 30  
 Tyr Gly His Lys Asp Pro Arg Gln Asp Thr Glu Ser Val Leu Leu Ile  
 35 40 45  
 His Ala Ile Asn Ser Gly Trp Leu Phe Leu Val Leu Asn Arg Phe Xaa  
 50 55 60

## 19527

Met Ser Ser Phe Phe Thr Ser Gly Ser Ala Gly Pro Arg Leu Val Asn  
65 70 75 80

<210> 43275

<211> 146

<212> PRT

<213> A.fumigatus

<400> 43275

Met Ser Arg Asp Gly Thr Tyr Gly Ile Pro Ser Pro Gln Phe Gln Ala  
1 5 10 15  
Thr Pro Ser Ser His Val Ser Ser Pro Ser His Thr Lys Ser Pro Gly  
20 25 30  
Phe Ala Phe Gln Gly Ala Met Ser Pro Asn Gly Met Asp Ala Gln Gln  
35 40 45  
Ala Gln His Ala Arg Ser Gln Leu Asn Leu His Ser Arg Asn Met Ser  
50 55 60  
Gln Thr Ser Pro Pro Ile Ser Ile Gly Gln Pro Glu Ser Thr Asp Pro  
65 70 75 80  
Lys Ser Ala Val Ser Gly Gly Pro Gly Pro Arg Val Ser Arg Val Pro  
85 90 95  
Ser Ala Ala Tyr Tyr Pro Ser Pro Phe Gln Lys His Tyr Asp Gln Leu  
100 105 110  
Gly Lys Leu Thr Phe Val Thr Val Ala Leu Pro Phe Phe Phe Ile Val  
115 120 125  
Phe Leu Thr Glu Val Ile Ser Cys Thr His Thr Phe Pro Cys Arg Thr  
130 135 140  
Gly Ile  
145

<210> 43276

<211> 70

<212> PRT

<213> A.fumigatus

<400> 43276

Phe Arg Val Leu Ile Leu Ser Pro Val Glu Gln Glu Tyr Asp Ala Gln  
1 5 10 15  
Ala Asp Met Ile Asp Glu Glu His Glu Ser Val Asp Ala Pro Pro Tyr  
20 25 30  
Val Ser Gly Phe Asn Ala Ala Thr Thr Ser Val Pro Pro Gly Ser His  
35 40 45  
Ser Leu Gly Pro Gln Leu Ala Asn Phe Asn Val Phe Thr Arg Gly Tyr  
50 55 60  
Arg Ala Ala Leu Gly Leu  
65 70

<210> 43277

<211> 77

<212> PRT

<213> A.fumigatus

<400> 43277

Ser Ile Asn Met Ser Asp Asn Asn Asn Asn Ala Ser Thr Leu Asn Ser  
1 5 10 15  
Tyr Ile Asn Gln Ala Thr Gly Leu Ala Gln Arg Ala Met Gly Ser Val

## 19528

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Thr | Gly | Asn | Pro | Ser | Thr | Gln | Val | Cys | Thr | Asp | Pro | Ile | Pro | Leu | Arg |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Tyr | Thr | Thr | Tyr | Asn | Pro | Leu | Thr | Thr | Ser | Gln | Ala | Lys | Gly | Glu | Ser |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Thr | His | Thr | Gln | Gly | Lys | Ala | Glu | Tyr | Ala | Ala | Ser | His |     |     |     |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     |  |  |

<210> 43278  
 <211> 152  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 43278 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Tyr         | Ala | Met | Arg | Gly | Cys | Phe | Arg | Leu | Ala | Val | Val | Lys | Thr | Asp | Ser |  |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Pro         | Ala | Gln | Ala | Ile | Thr | Asp | Ser | Pro | Ala | Asn | Pro | Gln | Ala | Asp | Phe |  |  |
|             |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |  |  |
| Gly         | Pro | Thr | Ile | Arg | Gly | Pro | Leu | Gly | Trp | Ile | Val | His | Ala | Arg | Ser |  |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Gly         | Asp | Lys | Gly | Pro | Asp | Ala | Asn | Cys | Gly | Phe | Trp | Val | Arg | His | His |  |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Asp         | Glu | Tyr | Leu | Trp | Leu | Arg | Ser | Leu | Leu | Ser | Ala | Pro | Lys | Ala | Lys |  |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |  |  |
| Glu         | Leu | Leu | Gly | Glu | Ala | Tyr | Asn | Ala | Asn | Pro | Glu | Leu | Gln | Ile | Glu |  |  |
|             |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| Arg         | Phe | Glu | Leu | Pro | Asn | Leu | Arg | Ala | Val | His | Phe | Leu | Phe | Arg | Asn |  |  |
|             |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Leu         | Leu | Asp | Arg | Gly | Val | Gly | Ile | Thr | Thr | Thr | Val | Asp | Phe | Leu | Gly |  |  |
|             | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Lys         | Asn | Val | Ala | Glu | Tyr | Leu | Arg | Ala | Arg | Trp | Val | Asp | Leu | Pro | Val |  |  |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Lys         | Phe | Leu | Asn | Arg | Gly | Lys | Leu |     |     |     |     |     |     |     |     |  |  |
| 145         |     |     |     |     | 150 |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 43279  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 43279 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Thr         | Phe | Asp | Ile | Arg | Lys | Cys | Asp | Asn | Pro | Ser | His | Leu | Leu | Tyr | Val |  |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Phe         | Pro | Asp | Ala | Gln | Gln | Gln | Trp | His | Ala | Lys | Ile | Ser | Asn | Gly | Lys |  |  |
|             |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Gln         | Pro | Tyr | Arg | Lys | Ala | Glu | Pro | Thr | His | Ser | Thr | Gln | Arg | Thr | Lys |  |  |
|             | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Thr         | Lys | Lys | Thr | Arg | Lys | Tyr | Thr | Tyr | Ala | Gln | His | Pro | Asp | Ala | Met |  |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| His         |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 65          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 43280  
 <211> 287  
 <212> PRT  
 <213> A.fumigatus



&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (287)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43280

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Trp | Val | Leu | Gly | Tyr | Gly | Gly | Thr | Leu | Asn | Ile | Trp | Val | Phe | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Gln | Ile | Ala | Arg | Ile | Val | Pro | Cys | Gln | Arg | Gln | Glu | Thr | Phe | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Glu | Ala | Val | Ser | Lys | Ser | Leu | Lys | Leu | Leu | Pro | Leu | Asn | Trp | Ala | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Tyr | Gly | Thr | Gly | Leu | Val | Ser | Gly | Val | Leu | Gly | Thr | Asp | Ser | Leu |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Ser | Leu | Ala | Gly | Leu | Asp | Val | Asn | Met | Thr | Phe | Gly | Leu | Ala | Lys | Asn |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Ala | Ser | Thr | Asp | Phe | Glu | Ser | Tyr | Pro | Val | Asp | Gly | Ile | Leu | Gly | Leu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Gly | Arg | Ser | Ala | Asn | Ser | Asn | Phe | Asn | Thr | Pro | Ser | Phe | Met | Glu | Thr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Ala | Thr | Gln | Arg | Leu | Leu | Lys | Ser | Asn | Ile | Ile | Gly | Phe | Ser | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser | Arg | Asn | Ser | Asp | Gly | Ala | Arg | Asp | Gly | Ala | Ala | Asn | Phe | Gly | Asp |
|     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Leu | Asp | Thr | Thr | Arg | Phe | Thr | Gly | Asp | Ile | Val | Tyr | Thr | Asn | Thr | Thr |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |     |
| Gly | Asp | Ser | Asn | Asn | Trp | Arg | Ile | Pro | Leu | Asp | Asp | Ala | Ser | Val | Asn |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Gly | Thr | Pro | Cys | Arg | Phe | Val | Asn | Lys | Thr | Ala | Val | Ile | Asp | Thr | Gly |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| Thr | Ser | Tyr | Ala | Met | Leu | Pro | Pro | Lys | Asp | Ala | Thr | Val | Leu | His | Asn |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Leu | Ile | Pro | Gly | Ala | Val | Thr | Thr | Ser | His | Gly | Gln | Asn | Phe | Thr | Leu |
|     | 210 |     |     |     |     | 215 |     |     |     | 220 |     |     |     |     |     |
| Pro | Cys | Asn | Ser | Thr | Ala | Val | Val | Gln | Val | Ser | Phe | Ser | Gly | Leu | Ser |
| 225 |     |     |     | 230 |     |     |     | 235 |     |     |     |     |     | 240 |     |
| Tyr | Asn | Ile | Ser | Pro | Lys | His | Tyr | Val | Gly | Pro | Ala | Tyr | Gly | Ser | Ala |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |
| Cys | Leu | Ser | Thr | Ile | Val | Gly | Gln | Ala | Leu | Tyr | Gly | Asp | Asp | Val | Trp |
|     |     | 260 |     |     |     | 265 |     |     |     |     |     | 270 |     |     |     |
| Leu | Leu | Gly | Asp | Val | Phe | Thr | Arg | Gly | Gly | Gln | Gly | Ala | Pro | Xaa |     |
|     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |

&lt;210&gt; 43281

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (165)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43281

Arg Arg Arg Ser Pro Gly Ser His Ala Thr Arg Lys Ser Arg Leu Leu

## 19530

```

1          5          10          15
Ser Ala Asp Val Leu Gln Lys Pro Asp Asn Arg Lys Asn Gln Asn His
      20          25          30
Pro Leu Arg Cys Ile Ala Ser Ser Pro Ser Ser Pro Asn Pro Ser Thr
      35          40          45
Asn Ser Ala Thr Thr Ser Thr Ala Ser Pro Thr Pro Pro Pro Pro Ser
      50          55          60
Tyr Lys Thr Ser Ser Pro Thr Ala Ser Ala Thr Ser Asn Ser Ala Pro
      65          70          75          80
Ser Pro Ala Pro Arg Pro Pro Ser Pro Ser Pro Glu Gln Asn Thr Ser
      85          90          95
Pro Pro Ser Ser Pro Pro Ser Lys Arg Phe Cys Arg Leu Thr Pro Pro
      100          105          110
Lys Ser Gln Ser Thr Ser Ser Ser Pro Ser Thr Ala Ala Thr Thr Pro
      115          120          125
Pro Pro Thr Pro Ser Pro Ser Ser Thr Trp Pro Leu Arg Thr Ala Pro
      130          135          140
Ala Ser Ser Ala Ser Ile Ser Ala Ala Thr Pro Arg Lys Ala Thr Ser
      145          150          155          160
Arg Cys Thr Val Xaa Pro Ser Pro Lys Pro Arg Pro Thr Ala
      165          170

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&lt;210&gt; 43282

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (127), (173), (202), (213), (219), (224)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43282

```

Leu Leu Leu Arg Leu Leu Gln Ile His Leu Pro Thr Leu Gln Arg Pro
1          5          10          15
Arg Gln Pro Arg Leu Arg His Leu Leu Arg Pro Thr Arg Leu Pro Arg
      20          25          30
Arg Arg Arg Pro Leu Pro Arg Thr Pro His His Pro Pro Arg Leu Ala
      35          40          45
His Pro Arg Leu His Pro Asn Arg Ile Pro His His Arg Pro His His
      50          55          60
His Arg Asn Val Phe Val Gly Ser Leu Leu Pro Asn Leu Ser Leu Pro
      65          70          75          80
His Pro Arg His Arg Pro Arg Gln Arg His Arg Arg Arg Arg Pro Leu
      85          90          95
His Arg Arg Pro Gly His Cys Ala Pro Pro Pro Arg Arg Arg Arg
      100          105          110
Tyr Leu Arg Gln Pro His Glu Arg Arg Arg Ala Val Arg Xaa Arg
      115          120          125
Pro Arg Gln Ser Gln Gly Pro Arg Pro Arg His His Arg Ala Leu Arg
      130          135          140
Arg Glu Arg Gly Ser Gly Ser Glu Arg Glu Leu Ser Thr Leu Leu Ser
      145          150          155          160
Phe Arg Ala Gly Arg Leu Gly His Val Ile His Val Xaa Glu Asp Phe
      165          170          175
Lys Arg Glu Ile Ala Arg Arg Ala Leu Gly Leu Glu Leu Cys Met Ser

```

## 19531

|                             |                     |                     |                 |  |     |
|-----------------------------|---------------------|---------------------|-----------------|--|-----|
|                             | 180                 |                     | 185             |  | 190 |
| Cys Tyr Val                 | His Ala Glu Met     | Ile Asp Xaa Gly Cys | Pro Ala His His |  |     |
|                             | 195                 | 200                 | 205             |  |     |
| Phe Gly Tyr Trp Xaa Ala Cys | Gly Leu Ser Xaa Gly | Leu Val Cys Xaa     |                 |  |     |
|                             | 210                 | 215                 | 220             |  |     |
| Phe Pro Pro Pro Leu Phe Asn |                     |                     |                 |  |     |
| 225                         | 230                 |                     |                 |  |     |

&lt;210&gt; 43283

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (140)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43283

|   |     |     |
|---|-----|-----|
| Gln Pro Glu Glu Pro Glu Pro Thr Lys Met His Ser Phe Phe Ser     |     |     |
| 1   | 5   | 10  |
| Val Phe Ser Lys Ser Ile Tyr Gln Leu Cys Asn Asp Leu Asp Ser Leu |     |     |
|   | 20  | 25  |
| Ala Tyr Ala Thr Ser Ser Val Leu Gln Asp Phe Leu Ala Asp Gly Val |     |     |
|   | 35  | 40  |
| Arg Tyr Leu Glu Leu Arg Thr Ile Pro Arg Ala Ser Pro Thr Leu Ala |     |     |
|   | 50  | 55  |
| Phe Thr Arg Thr Glu Tyr Leu Thr Thr Val Leu Thr Thr Ile Glu Thr |     |     |
|   | 65  | 70  |
| Phe Leu Ser Ala His Ser Ser Gln Ile Ser Val Tyr Leu Ile Leu Ala |     |     |
|   | 85  | 90  |
| Ile Asp Arg Gly Asn Asp Thr Ala Ala Asp Ala Leu Ser Ile Val Asp |     |     |
|   | 100 | 105 |
| Leu Ala Ile Ala His Arg Pro Arg Val Val Gly Val Asp Ile Cys Gly |     |     |
|   | 115 | 120 |
| Asn Pro Thr Lys Gly Asp Val Ala Leu Tyr Gly Xaa Ala Leu Ala Lys |     |     |
|   | 130 | 135 |
| Ala Lys Ala His Gly Leu Gly Ile Thr Val His Phe Ala Glu Asn Glu |     |     |
|   | 145 | 150 |
| Ala Pro Ala Arg Ser Gly Asn                                     |     |     |
|   | 165 |     |

&lt;210&gt; 43284

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43284

|   |    |    |
|---|----|----|
| Arg Gly Phe Phe His Pro Arg Gly Arg Met Ser Ala Asp Lys Ser Asn |    |    |
| 1   | 5  | 10 |
| Leu Lys Glu Tyr Tyr Gln Pro Val Thr Ile Arg Ile Tyr Ser Ser Asn |    |    |
|   | 20 | 25 |
| Pro Lys Ile Leu Glu Pro Leu Ala Arg Val Val Lys Pro Ala Asp Glu |    |    |
|   | 35 | 40 |
| Val Arg Lys Tyr Met Asn Glu Val Met Asp Arg Ala Glu Arg Ala Pro |    |    |
|   | 50 | 55 |
|   |    | 60 |

## 19532

Glu Gly Phe Leu Ala Leu Arg Leu Pro Arg Glu Asn Lys Asp Glu His  
 65 70 75 80  
 Glu Pro Glu Asp Thr Arg Lys Ser Gly Thr Pro Ala Pro Ala Ala Asn  
 85 90 95  
 Ser Gly Ala Arg Ser Arg Phe Leu Lys Ser Asn Ala Ala Gly Gly Gly  
 100 105 110  
 Glu Asn Phe  
 115

&lt;210&gt; 43285

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43285

Glu Leu Tyr Arg Pro Ser Glu Ser Asn Met Leu Phe Asp Ala Pro Ser  
 1 5 10 15  
 Leu Val Leu Tyr Met Cys Gly Ile Thr Val Tyr Ile Ala Asn Ile Val  
 20 25 30  
 Lys Gly Leu Arg Leu Ala Ser Ala Gly Lys Tyr Gly Glu Glu Leu Ala  
 35 40 45  
 Thr Ser Pro Glu Glu Lys Asp Gln Ile Leu Asn Arg Glu Asp Ser Leu  
 50 55 60  
 Lys Val Leu Ser Ala Ser Asn Thr Ile Leu Ala Leu Val Leu Val Gly  
 65 70 75 80  
 Val Leu Val Leu Gln Ala Gly Gln Trp Tyr Ala Glu Arg Lys Asp Ala  
 85 90 95  
 Gln Glu Tyr Glu Ser Leu Arg Lys Gly His Lys Glu Gly Gly Gly Gly  
 100 105 110  
 Gly Ala Ser Ser Ser Ala Ser Gly Ala Ala Ala Ala Lys Pro  
 115 120 125  
 Gly Arg Gln Gly Ser Val Lys Lys Lys Ser Asn  
 130 135

&lt;210&gt; 43286

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43286

Lys Thr Arg Lys Cys Pro Ala Ala Ile Ser Arg Asn Phe His Ser Leu  
 1 5 10 15  
 Thr Met Gly Arg Phe Gly Gly Phe Glu Tyr Gly Tyr Gln Gln Gly Val  
 20 25 30  
 Leu Gly Gln Ser Leu Val Met Thr Arg Phe Thr Glu Asn Phe Ser Ser  
 35 40 45  
 Val Val His Ser Ser Ala Ala Thr Gly Trp Leu Thr Ser Val Leu Gln  
 50 55 60  
 Leu Gly Gly Ile Val Gly Ser Leu Ser Ala Gly Ile Phe Gly Glu Ile  
 65 70 75 80  
 Phe Ser Arg Lys Tyr Thr Met Phe Ala Ala Cys Cys Trp Val Ile Leu  
 85 90 95  
 Gly Ser Tyr Leu Tyr Val Gly Ala Ser Ala Gly Met Ala Ser Leu Leu  
 100 105 110  
 Tyr Val Trp Thr Asn Leu Tyr Arg Ser Gly Ser Arg Ser Phe Gln Arg  
 115 120 125

# 19533

Cys Trp Pro Leu Val Gln Cys Leu Thr Gly Cys Ser Gly Asp Ala Arg  
 130 135 140  
 Ser Pro Gly Ile Leu Leu Ser Ile Arg Asp His Pro Glu Asp His Asp  
 145 150 155 160  
 Phe Leu Leu Gly Gly Leu Trp Gln  
 165

<210> 43287  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 43287  
 Asp Phe Phe Val Ser Pro Gly Asp Pro Ala Phe Tyr Leu His His Ala  
 1 5 10 15  
 Ala Ile Asp Arg Val Phe Trp Thr Trp Gln Asn Gln Asp Pro Lys Ser  
 20 25 30  
 Arg Thr Tyr Val Val Ala Gly Gln Thr Ile Leu Pro Ser Leu Val Pro  
 35 40 45  
 Asp Ala Pro Asn Ala Thr Leu Asp Asp Ile Val Asp Met Gly Ser Ala  
 50 55 60  
 Leu Ala Pro Pro Gln Thr Ile Arg Gln Leu Leu Asp  
 65 70 75

<210> 43288  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (67), (72), (76)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43288  
 Cys Phe Leu Phe Ala Cys Leu Ala Ile Ala Thr Trp Asp Asn Leu Ser  
 1 5 10 15  
 Ile Ser Ser Leu Thr Ser Tyr Ala Ser Trp Leu Pro Leu Lys Ser Gln  
 20 25 30  
 Asp Met Tyr Ser Ser Tyr Thr Leu Leu Lys Gln Arg Thr Thr Asn Ser  
 35 40 45  
 Pro Gly Asp Met Cys Pro Met Asn Ser Tyr Ser His Ala Thr Ser Leu  
 50 55 60  
 His Phe Xaa Thr Asp Trp Thr Xaa Thr Tyr Phe Xaa Gly Pro Asp  
 65 70 75

<210> 43289  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (71)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43289

```

Ile Ala Ser Ile Ile Lys Trp Ser Leu Val Gln Asn Ser Arg Ser Val
1           5           10           15
Tyr Thr Val Ser Ser Leu Leu Leu Tyr Thr Leu Ser Met Gln Leu Leu
          20           25           30
Asp Ile Ser Lys Arg Asp Val Ser Ser Trp Phe Phe Asp Arg Glu Ala
          35           40           45
Cys Lys Arg Ser Leu Arg Gly Leu Val Gln Ser Ser Pro Gly Val Gln
          50           55           60
Glu Arg Ser Val Ser Lys Xaa Pro Ala
65           70

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&lt;210&gt; 43290

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43290

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Leu Glu Ala Asn Leu Pro Arg Arg Leu Val Phe Asp Leu Leu Glu Leu
1           5           10           15
Tyr Phe Thr Ser Ala Phe Ser Thr His Met His Pro Val Cys His His
          20           25           30
Ile His Cys Tyr Val Leu Arg Lys Ala Ser Phe Leu Ser Arg Glu Asn
          35           40           45
Pro Arg Pro Ser Ser Pro Ala Leu Leu Ala Ser Met Leu Trp Val Ala
          50           55           60
Ala Leu Asp Asp Arg Ala Phe Ala Leu Ser Ile Ser Pro Pro Gln Arg
65           70           75           80
Lys Lys Ile Cys Gln Phe Leu Cys Ala Leu Thr Ile Arg Leu Leu Arg
          85           90           95
Pro Leu Ile His Val Ser Phe Lys Glu Gln Ala Gly Ser Asn Ala Ser
          100          105          110
Asp Pro Thr Phe Thr Gly Val Ala Pro Glu Cys Pro Pro Thr Thr Val
          115          120          125
His His Pro Phe Glu Ser Ser Gly Asp Asp Arg Gly Leu Val Gly Pro
          130          135          140
Ala Gly Ser Leu Asp Asp Val Ile Thr Tyr Ile His Val Ala Ser Ile
145          150          155          160
Ile Ser Ser Ser Glu Gln Lys Ala Ala Ser Met Arg Trp Phe Val Leu
          165          170          175
Ser Pro Phe Arg Gly Cys Arg Arg Arg Asp
          180          185

```

&lt;210&gt; 43291

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43291

```

Ile Ser Phe Leu Phe Tyr Phe Val Leu Phe Tyr Phe Ile Phe Ile Phe
1           5           10           15
Ile Leu Phe Phe Ile Phe Ile Phe Ile Phe Ile Phe Ile Phe Ile Phe
          20           25           30
Ile Phe Ile Phe Ile Phe Ile Phe Ile Phe Ile Phe Ile Phe Ile Ser
          35           40           45
Asp Arg Phe Cys Phe Leu Val Ser Lys Thr Tyr Ser Met Tyr Phe Tyr

```

50 55 60

Gln  
65

<210> 43292  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (75)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43292  
 Ser Ile Glu Gly Thr Pro Ala Arg Ile Thr Ser Ala Leu Gln Leu His  
 1 5 10 15  
 Pro Thr Arg His Leu Asn Val Phe Tyr Leu Leu Leu Phe Asp Tyr Ile  
 20 25 30  
 Ile Ser Ser Ile Thr Thr Thr Ile Thr Ala Leu Phe Ser Ile Met Leu  
 35 40 45  
 Lys Pro Gly Val Ala Ser Ile Val Pro Ser Ile Tyr Phe Thr Lys Gly  
 50 55 60  
 Arg Lys Val Arg Ala Cys Gly Asn Pro Ser Xaa Ser  
 65 70 75

<210> 43293  
 <211> 223  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (87), (89), (91), (92), (94), (95), (211), (221)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43293  
 Thr Ser Ser Leu Lys Ile Ile Leu Leu Pro Arg Asn Lys Val Gln Asp  
 1 5 10 15  
 Arg Ile Val Gly Lys Thr Pro Pro Arg Asn Thr Thr Glu Gly Gly Val  
 20 25 30  
 Trp Gly Ala Leu His Asp Gly Ser Ala Ile Gln Gln Ile Gly Thr Gln  
 35 40 45  
 Trp Leu Val Leu Ile Met Leu Leu Ala Val Leu Gln Met Leu Arg Ile  
 50 55 60  
 Lys Tyr Phe Val Ala Ser Ile Arg Ala Gln Tyr Asp Tyr Leu Leu Ser  
 65 70 75 80  
 Pro Ala Leu Ser Lys Gln Xaa Asn Xaa Val Xaa Xaa Val Xaa Xaa Pro  
 85 90 95  
 Leu Gly Gly Leu Leu Ser Val Pro Phe Ile Gly Thr Ile Leu Asp Thr  
 100 105 110  
 Leu Lys Thr Gln His Val Leu Leu Ile Leu Val Ser Thr Ala Thr Val  
 115 120 125  
 Ile Gly Ile Leu Gly Cys Ile Pro His Ser Leu Pro Ala Gly Tyr Ala  
 130 135 140  
 Asn Ile Ala Leu Phe Val Ile Tyr Arg Pro Phe Tyr Tyr Thr Ala Val

## 19536

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 145 |     | 150 |     | 155 |     | 160 |     |     |     |     |     |     |     |     |     |
| Ser | Asp | Tyr | Ala | Ala | Lys | Val | Phe | Gly | Phe | Gln | Thr | Phe | Gly | Lys | Val |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Tyr | Gly | Leu | Ile | Ile | Cys | Leu | Ala | Gly | Leu | Gly | Asn | Phe | Leu | Gln | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Gly | Leu | Asp | Ala | Leu | Thr | Phe | Lys | Leu | Phe | Ala | Arg | Asp | Arg | Leu | His |
|     |     | 195 |     |     |     |     | 200 |     |     |     | 205 |     |     |     |     |
| Pro | Gly | Xaa | Lys | Ile | Ala | Arg | His | Gln | Phe | Lys | Ile | Xaa | Ala | Gly |     |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |

&lt;210&gt; 43294

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (75)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43294

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Tyr | Asn | Pro | Pro | Arg | Phe | Met | Ala | Ser | Glu | Ala | Asp | Leu | Asp | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Glu | Ile | Lys | Gly | Leu | Ser | Ile | Leu | Ser | Glu | His | Pro | Glu | Leu | Tyr | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Glu | Phe | Ala | Lys | Leu | Gly | Cys | Val | Gly | Ser | Leu | Thr | Ser | Leu | Leu | Ser |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| His | Glu | Asn | Ala | Asp | Ile | Ala | Ile | Asp | Ala | Ile | Gln | Ile | Ile | Ser | Glu |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Leu | Thr | Asp | Lys | Asp | Val | Gly | Thr | Ser | His | Xaa | Val | Val | Gly | Asp | Ser |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Val |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43295

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (31), (106)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43295

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Val | Asn | Asn | Thr | Arg | Tyr | Asn | Ser | Pro | Gly | Val | Pro | Arg | Leu | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Pro | Ala | Tyr | Asn | Trp | Trp | Ser | Glu | Ala | Leu | His | Gly | Val | Xaa | Gly |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Ser | Pro | Gly | Val | Glu | Phe | Ala | Asp | Ser | Gly | Pro | Phe | Ser | Tyr | Ala | Thr |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ser | Phe | Pro | Gln | Pro | Ile | Leu | Leu | Gly | Ala | Thr | Phe | Asp | Asp | Asp | Leu |
|     | 50  |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |     |
| Ile | Lys | Gln | Val | Ala | Thr | Val | Val | Ser | Thr | Glu | Gly | Arg | Ala | Phe | Gly |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Asn | Ala | Gly | Arg | Ser | Gly | Leu | Asp | Phe | Trp | Thr | Pro | Asn | Ile | Asn | Pro |



| Year | Country | Population (millions) | Urban population (millions) | Urban population (%) | Population density (per sq km) | Urban population density (per sq km) | Population growth rate (%) | Urban population growth rate (%) | Population growth rate (per 1,000) | Urban population growth rate (per 1,000) | Population growth rate (per 1,000) | Urban population growth rate (per 1,000) |
|------|---------|-----------------------|-----------------------------|----------------------|--------------------------------|--------------------------------------|----------------------------|----------------------------------|------------------------------------|--|------------------------------------|--|
| 1950 | Algeria | 4.0                   | 1.0                         | 25.0                 | 100                            | 250                                  | 1.5                        | 2.5                              | 15                                 | 25                                       | 15                                 | 25                                       |
| 1955 | Algeria | 4.2                   | 1.2                         | 28.6                 | 110                            | 280                                  | 1.6                        | 2.6                              | 16                                 | 26                                       | 16                                 | 26                                       |
| 1960 | Algeria | 4.5                   | 1.5                         | 33.3                 | 120                            | 300                                  | 1.7                        | 2.7                              | 17                                 | 27                                       | 17                                 | 27                                       |
| 1965 | Algeria | 4.8                   | 1.8                         | 37.5                 | 130                            | 330                                  | 1.8                        | 2.8                              | 18                                 | 28                                       | 18                                 | 28                                       |
| 1970 | Algeria | 5.1                   | 2.1                         | 41.2                 | 140                            | 360                                  | 1.9                        | 2.9                              | 19                                 | 29                                       | 19                                 | 29                                       |
| 1975 | Algeria | 5.4                   | 2.4                         | 44.4                 | 150                            | 390                                  | 2.0                        | 3.0                              | 20                                 | 30                                       | 20                                 | 30                                       |
| 1980 | Algeria | 5.7                   | 2.7                         | 47.4                 | 160                            | 420                                  | 2.1                        | 3.1                              | 21                                 | 31                                       | 21                                 | 31                                       |
| 1985 | Algeria | 6.0                   | 3.0                         | 50.0                 | 170                            | 450                                  | 2.2                        | 3.2                              | 22                                 | 32                                       | 22                                 | 32                                       |
| 1990 | Algeria | 6.3                   | 3.3                         | 52.3                 | 180                            | 480                                  | 2.3                        | 3.3                              | 23                                 | 33                                       | 23                                 | 33                                       |
| 1995 | Algeria | 6.6                   | 3.6                         | 54.5                 | 190                            | 510                                  | 2.4                        | 3.4                              | 24                                 | 34                                       | 24                                 | 34                                       |
| 2000 | Algeria | 6.9                   | 3.9                         | 56.5                 | 200                            | 540                                  | 2.5                        | 3.5                              | 25                                 | 35                                       | 25                                 | 35                                       |
| 2005 | Algeria | 7.2                   | 4.2                         | 58.3                 | 210                            | 570                                  | 2.6                        | 3.6                              | 26                                 | 36                                       | 26                                 | 36                                       |
| 2010 | Algeria | 7.5                   | 4.5                         | 60.0                 | 220                            | 600                                  | 2.7                        | 3.7                              | 27                                 | 37                                       | 27                                 | 37                                       |
| 2015 | Algeria | 7.8                   | 4.8                         | 61.5                 | 230                            | 630                                  | 2.8                        | 3.8                              | 28                                 | 38                                       | 28                                 | 38                                       |
| 2020 | Algeria | 8.1                   | 5.1                         | 63.0                 | 240                            | 660                                  | 2.9                        | 3.9                              | 29                                 | 39                                       | 29                                 | 39                                       |
| 2025 | Algeria | 8.4                   | 5.4                         | 64.3                 | 250                            | 690                                  | 3.0                        | 4.0                              | 30                                 | 40                                       | 30                                 | 40                                       |
| 2030 | Algeria | 8.7                   | 5.7                         | 65.5                 | 260                            | 720                                  | 3.1                        | 4.1                              | 31                                 | 41                                       | 31                                 | 41                                       |
| 2035 | Algeria | 9.0                   | 6.0                         | 66.7                 | 270                            | 750                                  | 3.2                        | 4.2                              | 32                                 | 42                                       | 32                                 | 42                                       |
| 2040 | Algeria | 9.3                   | 6.3                         | 67.7                 | 280                            | 780                                  | 3.3                        | 4.3                              | 33                                 | 43                                       | 33                                 | 43                                       |
| 2045 | Algeria | 9.6                   | 6.6                         | 68.8                 | 290                            | 810                                  | 3.4                        | 4.4                              | 34                                 | 44                                       | 34                                 | 44                                       |
| 2050 | Algeria | 9.9                   | 6.9                         | 69.7                 | 300                            | 840                                  | 3.5                        | 4.5                              | 35                                 | 45                                       | 35                                 | 45                                       |
| 2055 | Algeria | 10.2                  | 7.2                         | 70.6                 | 310                            | 870                                  | 3.6                        | 4.6                              | 36                                 | 46                                       | 36                                 | 46                                       |
| 2060 | Algeria | 10.5                  | 7.5                         | 71.4                 | 320                            | 900                                  | 3.7                        | 4.7                              | 37                                 | 47                                       | 37                                 | 47                                       |
| 2065 | Algeria | 10.8                  | 7.8                         | 72.2                 | 330                            | 930                                  | 3.8                        | 4.8                              | 38                                 | 48                                       | 38                                 | 48                                       |
| 2070 | Algeria | 11.1                  | 8.1                         | 73.0                 | 340                            | 960                                  | 3.9                        | 4.9                              | 39                                 | 49                                       | 39                                 | 49                                       |
| 2075 | Algeria | 11.4                  | 8.4                         | 73.7                 | 350                            | 990                                  | 4.0                        | 5.0                              | 40                                 | 50                                       | 40                                 | 50                                       |
| 2080 | Algeria | 11.7                  | 8.7                         | 74.4                 | 360                            | 1020                                 | 4.1                        | 5.1                              | 41                                 | 51                                       | 41                                 | 51                                       |
| 2085 | Algeria | 12.0                  | 9.0                         | 75.0                 | 370                            | 1050                                 | 4.2                        | 5.2                              | 42                                 | 52                                       | 42                                 | 52                                       |
| 2090 | Algeria | 12.3                  | 9.3                         | 75.6                 | 380                            | 1080                                 | 4.3                        | 5.3                              | 43                                 | 53                                       | 43                                 | 53                                       |
| 2095 | Algeria | 12.6                  | 9.6                         | 76.2                 | 390                            | 1110                                 | 4.4                        | 5.4                              | 44                                 | 54                                       | 44                                 | 54                                       |
| 2100 | Algeria | 12.9                  | 9.9                         | 76.7                 | 400                            | 1140                                 | 4.5                        | 5.5                              | 45                                 | 55                                       | 45                                 | 55                                       |

```
<210> 43296
<211> 131
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<211> 70
<212> PRT
<213> A.fumigatus
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<221> UNSURE

<223> Identity of amino acid sequences at the above locations are unknown.

[illegible]

&lt;210&gt; 43298

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (170), (175), (199)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43298

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | Asp | Arg | Gln | Arg | Arg | Arg | Val | Pro | Ser | Arg | Pro | Cys | Thr | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Val | Leu | Ser | Ser | Val | Arg | Gln | Ala | Val | Arg | Asn | His | Gly | Ser | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Val | Ser | Thr | Ile | Leu | Cys | Gly | Val | Gln | Val | Ser | Glu | Asp | Glu | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Gly | Leu | Asp | Ala | Phe | Arg | Tyr | Gly | Ser | Ser | Arg | Leu | Ala | Ser | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Pro | Lys | Gly | Gly | Met | Leu | Ala | Glu | Val | Pro | Ala | Ser | Leu | Leu | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ser | Ser | Ser | Ser | Cys | Glu | Leu | Leu | Val | Ser | Ala | Glu | Arg | Thr | Cys | His |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Trp | Lys | Thr | Met | Thr | Asn | Glu | Pro | Ser | Thr | Thr | Leu | Cys | Leu | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| His | Arg | Ala | His | Met | Pro | Pro | Ala | Ser | Ser | Ala | Pro | Asn | Ser | Tyr | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Glu | Glu | Met | Ala | Tyr | Pro | Ser | Arg | Thr | Ile | Ala | Phe | Gln | Ala | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Met | Ile | Thr | Ser | Ile | Val | Glu | Asn | Leu | Gln | Thr | His | Gln | Glu | Ile |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Tyr | Ala | Pro | Ala | Phe | Met | Leu | Val | Xaa | Pro | Phe | Lys | Asp | Xaa | Tyr |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Tyr | Leu | Leu | Leu | Thr | Phe | Gln | Gln | Arg | Leu | Gln | Leu | Val | Leu | Gly | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | His | Ala | Arg | Leu | Pro | Xaa | Ala | Val | Ile | Ser | Thr | Ile | Tyr | Cys | Tyr |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Asp | Val | Pro | Gly | Lys | Asn | Gln | His | Leu | His | Ala | Arg | Pro |     |     |     |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |

&lt;210&gt; 43299

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43299

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Gly | Cys | Pro | Ser | Ser | Arg | Val | Val | Arg | Thr | Ala | Asp | Ser | Phe | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Glu | Ser | Leu | Ile | Pro | Ala | Glu | Leu | Ala | Ser | Leu | Pro | Ser | Thr | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Gly | Ile | Ser | Gln | Phe | Met | Thr | Lys | Leu | Pro | Ser | Phe | Asp | Ser | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Met | Ala | Ala | Ile | Lys | Glu | Gly | Ala | Glu | Lys | Gln | Gly | Lys | Val | Val | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Tyr | Val | Gly | Ser | Val | Asp | Val | Ala | Lys | Lys | Gly | Gly | Ser | Arg | Trp | Ala |

[illegible]

```
<210> 43300
<211> 68
<212> PRT
<213> A.fumigatus
```

```
<210> 43301
<211> 92
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (5),(6),(7),(9),(10),(13),(14),(16),(17),(18),(22),(27)
<223> Identity of amino acid sequences at the above locations are unknown.
```

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<210> 43302
<211> 87
<212> PRT
<213> A.fumigatus
```

<400> 43302  
 Arg Leu His Arg Ser Arg Met Ser Ile Ala Thr Pro Ile Asn Leu Ile  
 1 5 10 15  
 Leu Leu Ser Leu Phe Ala Ile Leu Val Tyr Met Gln Leu Arg Pro Lys  
 20 25 30  
 Ala Pro Val Ala Leu Pro Gln Ala Pro Pro Pro Val Val Phe Arg Thr

## 19540

|   |    |    |
|---|----|----|
| 35  | 40 | 45 |
| Phe Thr Pro Thr Thr Leu Leu Glu Tyr Asn Gly Glu Cys Asp Lys Pro |    |    |
| 50  | 55 | 60 |
| Val Tyr Leu Ala Val Arg Gly Arg Val Phe Asp Val Thr Pro Gly Lys |    |    |
| 65  | 70 | 75 |
| Asn Phe Tyr Gly Pro Val Cys                                     |    | 80 |
| 85  |    |    |

&lt;210&gt; 43303

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (19), (106), (128)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43303

|   |     |     |
|---|-----|-----|
| Lys Arg Gly Glu Arg Gly Arg Lys Trp Arg Glu Arg Ser Arg Glu Glu |     |     |
| 1   | 5   | 10  |
| Thr Glu Xaa Arg Gln Gly Arg Asp Arg Glu Arg Pro Gly Gln Thr Ser |     |     |
| 20  | 25  | 30  |
| Glu Asp Asp Arg Asn Arg Glu Arg Arg Gln Arg Glu Asp Glu His Arg |     |     |
| 35  | 40  | 45  |
| Arg Arg Arg Arg Gly Gly Arg Gly Glu Pro Ala Arg Arg Lys Glu Lys |     |     |
| 50  | 55  | 60  |
| Arg Arg Gln Glu Asp Lys Arg Glu Arg Lys Arg Asn Lys Gly Gly Gly |     |     |
| 65  | 70  | 75  |
| Ala Lys Lys Ala Gly Arg Gly Arg Glu Lys Arg Glu Gly Ala Lys Lys |     |     |
| 85  | 90  | 95  |
| Glu Lys Gln Thr Arg Gly Gly Arg Ala Xaa Gly Arg Arg Gly Ala Gly |     |     |
| 100   | 105 | 110 |
| Gly Ala Pro Pro Pro Pro Leu Val Ser Phe Leu Ile Phe Xaa         |     |     |
| 115   | 120 | 125 |
| Arg Lys Pro Leu Trp Thr Ile Thr Arg                             |     |     |
| 130   | 135 |     |

&lt;210&gt; 43304

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43304

|   |    |    |
|---|----|----|
| Asp Asn Arg Ser Ile Phe His Ser His Pro Leu Ile Thr Pro Gln Ile |    |    |
| 1   | 5  | 10 |
| Gln Leu Ser Glu Ser Ile Asn Ser Thr Tyr Gln Phe Lys Met Ser Ala |    |    |
| 20  | 25 | 30 |
| Ser Val Pro Ala Pro Asp Ala Asn Gln Asp Tyr Lys Ala Ser Leu Leu |    |    |
| 35  | 40 | 45 |
| Thr Leu Leu Ile Ser Asn Asn Val Leu Ser Tyr Gly Thr Tyr Thr Leu |    |    |
| 50  | 55 | 60 |
| Lys Ser Gly Arg Glu Ser Pro Tyr Phe Phe Thr Ser Ser Leu Leu His |    |    |
| 65  | 70 | 75 |
| Thr Ala Pro Leu Leu Arg Ala Thr Ser Ala Ala Tyr Ala Ser Val Leu |    |    |
| 85  | 90 | 95 |

## 19541

Ser Ala Glu Pro Phe Val Lys Thr Ala Asn Asp Gly Thr Leu Arg His  
                   100                  105                  110  
 Lys Phe Asp Ile His Leu Arg Val Leu Ser Ser Leu Gly Ala Ser Leu  
                   115                  120                  125  
 Ser Arg Asp Met Lys Gln Tyr Tyr Arg Val  
                   130                  135

<210> 43305  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 43305  
 Val Ser Ser Cys Gly Tyr Thr Phe Leu Trp Asn Leu Leu Asp Tyr Ser  
 1                  5                  10                  15  
 Ala Gly Val Leu Pro Val Ser His Val Asp Pro Lys Lys Asp Ala Leu  
                   20                  25                  30  
 Ser Ala Pro Tyr Lys Thr Val Leu Lys Gln Leu Gly Ala Asn His Ala  
                   35                  40                  45  
 Ile Ala Arg Gly Ala Trp Lys His Tyr Asp Ala Ala Lys Met Ala Gly  
                   50                  55                  60  
 Leu Pro Thr Ala Val Gln Val Val Gly Arg Arg Trp Gln Glu Glu Lys  
 65                  70                  75                  80  
 Val Leu Gly Tyr Met Ala Val Val Glu Gln Ala Leu Glu Gly Tyr Tyr  
                   85                  90                  95  
 Asp Lys Glu Thr Gly Glu Gly Gly Lys Tyr Pro Leu Leu Glu Ile Asp  
                   100                  105                  110

<210> 43306  
 <211> 178  
 <212> PRT  
 <213> A.fumigatus

<400> 43306  
 Asp Asp Glu Asn Ser Asp Asp Gly Gln Asp Asp Val Gln Ala Ser Leu  
 1                  5                  10                  15  
 Ser Asn Ile Ser Phe Gly Ala Leu Ala Lys Ala Gln Ala Ser Leu Gly  
                   20                  25                  30  
 Pro Thr Ala Lys Arg Lys Ser Lys Ala Thr Gln Ser Lys Thr Asp Asp  
                   35                  40                  45  
 Gly Glu Thr Pro Ala Ala Ser Pro Leu Asp Asp Ile Arg Ala Arg Ile  
                   50                  55                  60  
 Arg Glu Ala Arg Glu Gln Lys Arg Glu Gly Ser Ser Lys Ser Lys Asp  
 65                  70                  75                  80  
 Leu Glu Lys Phe Ser Arg Ser Ser Lys His Ala Pro Met Val Gln Ser  
                   85                  90                  95  
 Ser Lys His Pro Val Thr Arg Lys Arg Thr Ile Ile Glu Pro Pro Ala  
                   100                  105                  110  
 Ala Leu Lys Ser Arg Asp Pro Arg Phe Asp Pro Ala Val Arg Ser Gln  
                   115                  120                  125  
 Ser Gly Arg Ser Glu Ala Ser Gln Ser Ala Tyr Ala Phe Leu Asp Asp  
                   130                  135                  140  
 Tyr Arg Ala Ala Glu Leu Lys Glu Met Lys Glu Lys Leu Ala Lys Asn  
 145                  150                  155                  160  
 Lys Asp Pro Arg Gln Lys Glu Ala Leu Lys Arg Asp Ile Arg Ser Ala  
                   165                  170                  175

Thr Asp

&lt;210&gt; 43307

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (29)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43307

```

Thr Ile Leu Ser Thr Leu Val Tyr Ile Ile Asn Pro Met Arg Tyr Tyr
1           5           10           15
Lys Ile Asn Leu Phe Thr Pro Gln Ala Gly Leu Xaa Ile Ser Thr
           20           25           30
Thr Pro Phe Gln Pro Arg Gly Glu Asp Ser Ser Phe Phe Phe Asp
           35           40           45
Phe Glu Ala Leu Asp Phe Phe Ser Phe Ser Gly Leu Arg Ser Phe Phe
           50           55           60
Leu Leu Gly Val Ser Ser Lys Ala Pro Val Ser Ala Ser Ala Val Leu
65           70           75           80
Gly Ala Ala Glu Asp Lys Pro Ala Asn Ala Pro Asp Ile Val Leu Glu
           85           90           95
Gly Ser His Trp Pro Cys Gly Arg Gly Val Ile Glu Glu
           100          105

```

&lt;210&gt; 43308

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43308

```

Gly Phe Pro Ala Ala Glu Gly Tyr Phe Gln Ser Val Ser Gly His Arg
1           5           10           15
Val Arg Gly Thr Val Arg Phe Arg Val Val Asp Ile Asp Val Ile Pro
           20           25           30
Gly Ser Asp Arg Glu Arg Gly Phe Leu Ser Ile Glu Gly Thr Met Leu
           35           40           45
Ser Pro Glu Glu Glu Ala Arg Val Leu Asp Asp Glu Arg Asn Gly Asn
           50           55           60
Tyr Ser Ser Met Thr Pro Arg Pro Gln Gly Gln Trp Glu Pro Ser Ser
65           70           75           80
Thr Met Ser Gly Ala Leu Ala Gly Leu Ser Ser Ala Ala Pro Ser Thr
           85           90           95
Ala Asp Ala Asp Thr Gly Ala Leu Glu Thr Pro Ser Lys Lys Lys
           100          105          110
Glu Arg Lys Pro Glu Lys Glu Lys Ser Lys Ala Ser Lys Ser Lys
           115          120          125
Lys Lys Lys Glu Glu Ser Ser Pro Arg Gly
           130          135

```

&lt;210&gt; 43309

&lt;211&gt; 222

19543

<212> PRT

<213> A.fumigatus

<400> 43309

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Leu | Trp | Val | Asp | Leu | Pro | Lys | Glu | Leu | Lys | Met | Cys | Glu | Pro | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Arg | Asp | Leu | Arg | Ala | Ser | Glu | Ile | Pro | Val | Val | Glu | Val | Asp | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Arg | Val | Thr | Val | Lys | Val | Ile | Ser | Gly | Gln | Ser | His | Gly | Val | Asp |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Val | Arg | Asp | Val | Ala | Tyr | Thr | Pro | Val | Trp | Leu | Leu | Asp | Met | Thr |
|     |     |     | 50  |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Arg | Pro | Gly | Gly | Arg | Ile | Ser | Gln | Pro | Leu | Pro | Glu | Gly | Trp | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Phe | Ala | Tyr | Thr | Leu | Ala | Gly | Thr | Thr | Ile | Phe | Gly | Ser | Asn | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Thr | Arg | Val | Val | Lys | Glu | Phe | His | Asn | Val | Val | Phe | Asp | Gln | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Gly | Tyr | Val | Glu | Ala | Ser | Val | Pro | Asp | Asn | Ala | Glu | Ser | Glu | Ser |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Phe | Ile | Leu | Val | Ala | Gly | Gln | Pro | Leu | Asp | Gln | Lys | Val | Val | Gln |
|     |     |     | 130 |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr | Gly | Pro | Phe | Val | Leu | Thr | Ser | Gln | Glu | Glu | Val | Tyr | Gln | Ala | Met |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Asp | Tyr | Gln | Thr | Ala | Ser | Asn | Gly | Val | His | His | Gly | Ala | Gly | Arg |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Tyr | Arg | Ala | Ala | Thr | Leu | Val | Arg | Pro | Gly | Leu | Thr | Ala | Gly | Arg | Pro |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Arg | Ala | Arg | Arg | Glu | Glu | Asn | Val | Gly | Arg | Thr | Thr | Thr | Thr | Glu | Thr |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Met | Pro | Arg | Val | His | Lys | Lys | Trp | Asp | Ala | Gln | Gly | Thr |     |     |
|     |     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |

<210> 43310

<211> 132

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (127), (128)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43310

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Pro | Leu | Ser | Met | Pro | Arg | Ser | Ser | Ala | Thr | Ala | Arg | Lys | Ser | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Asn | Arg | His | Glu | Asn | Gly | Ser | Ala | Asn | Thr | Gly | Lys | Lys | Val | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Gln | Arg | Ser | Asn | Gly | His | Leu | Asn | Gly | Asn | Leu | Asn | Gly | Gly | Ser |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Ser | Thr | Ser | Leu | Ser | Ser | Ser | Gln | Val | Asp | Leu | Pro | Ser | Ser | Arg |
|     |     |     | 50  |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Ser | Ser | Ser | Asp | Pro | Val | Val | Pro | Thr | Thr | Thr | Ala | Ala | Ser | Thr | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Asn | Gly | Thr | Pro | Asp | Ser | Ser | Lys | Gly | Asp | Cys | Asn | Ala | Pro | Asp |
|     |     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |

## 19544

His Leu Asn Gly Tyr Ala Lys Gly Asn Ala Asp Met Ser Tyr Val Gln  
                   100                  105                  110  
 Asn Asp Gly Val Ala Ser Gln Thr Gly Gly Asp Val Ala Gly Xaa Xaa  
                   115                  120                  125  
 Phe Ala Phe Tyr  
                   130

&lt;210&gt; 43311

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (29)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43311

Ile Asn Lys Thr Val Tyr Glu Arg Ala Met Asn Ala Trp Ser Lys Pro  
 1                  5                  10                  15  
 Gly Gly Cys Lys Asp Leu Ile Val Lys Cys Arg Glu Xaa Ala Ala Glu  
                   20                  25                  30  
 Gly Asp Pro Thr Met Ser Gly His Asn Glu Thr Val Asn Glu Ala Cys  
                   35                  40                  45  
 Arg Arg Ala Asn Asp Tyr Cys Ser Asn Gln Val Glu Gly Pro Tyr Ile  
                   50                  55                  60  
 Leu Phe Ser Lys Arg Gly Tyr Tyr Asp Ile Ala His Phe Asp Pro Asp  
                   65                  70                  75                  80  
 Pro Phe Pro Pro Pro Tyr Phe Gln Gly Phe Leu Asn Gln Asn Trp Val  
                   85                  90                  95  
 Gln Ala Ala Leu Gly Val Pro Val Asn Phe Ser Ile Ser Val Asp Ser  
                   100                  105                  110  
 Thr Tyr Ser Ala Phe Ala Ser Thr Gly Asp Tyr Pro Arg Ala Asp Val  
                   115                  120                  125  
 His Gly Tyr Leu Glu Asp Leu Ala Tyr Val Leu Asp Ser Gly Ile Lys  
                   130                  135                  140  
 Val Ala Leu Val Tyr Gly Asp Arg Asp Tyr Ala Cys Pro Trp Asn Gly  
                   145                  150                  155                  160  
 Gly Glu Glu Val Ser Leu Arg Val Phe Asp His Trp Gly Ser Glu Gly  
                   165                  170                  175  
 Ser Asp Ala

&lt;210&gt; 43312

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43312

Val Gly Ala Ile Gly Asn Glu Ile Arg Asn Gly Leu Leu Trp Pro Leu  
 1                  5                  10                  15  
 Gly Lys Pro Asp Asn Tyr Ala Asn Ile Ala Asn Ile Leu His Ser Ala  
                   20                  25                  30  
 Ala Phe Gly Val Lys Asp Ser Thr Leu Ser Pro Lys Pro Lys Ile Met  
                   35                  40                  45  
 Ile His Leu Asp Asn Gly Trp Asp Trp Ser Ala Gln Lys Phe Phe Tyr



## 19545

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |     |
| Asp | Arg | Val | Leu | Ser | Ser | Gly | Ala | Asn | Leu | Val | Lys | Ser | Asp | Phe | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Ile | Gly | Val | Ser | Tyr | Tyr | Pro | Phe | Tyr | Asn | Pro | Ser | Ala | Thr | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Ala | Leu | Thr | Thr | Ser | Leu | Lys | Asn | Leu | Arg | Ser | Thr | Tyr | Gly | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Val | Leu | Val | Val | Glu | Thr | Asp | Trp | Pro | Val | Ser | Cys | Pro | Asn | Pro |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Tyr | Ala | Phe | Arg | Leu |     |     |     |     |     |     |     |     |     |     |
| 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43313

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (222)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43313

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Leu | Met | Glu | Glu | Tyr | Ala | Arg | Val | Ile | His | Phe | Tyr | Arg | Asn | Gly |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Asn | Phe | Tyr | Arg | Thr | Tyr | Gln | Pro | Asp | Gly | Val | Pro | Leu | Glu | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Ala | Tyr | Thr | Gln | Thr | Leu | Gln | Ser | Arg | Leu | Glu | Leu | Trp | Lys | Ser |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Phe | Gly | Tyr | Ser | Tyr | Ser | Cys | Gln | Lys | Ala | Gln | Gly | Ser | Pro | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Ser | Ala | Arg | Ala | Ser | Leu | Leu | Leu | Ile | Gln | Tyr | Tyr | Ile | Ala | Leu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Val | Thr | Val | Ser | Thr | Ser | Val | Tyr | Ala | Glu | Glu | Thr | Leu | Tyr | Asp | Arg |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe | Leu | Asp | Ala | Phe | Lys | Arg | Ile | Leu | Ser | Leu | Val | Arg | Thr | Ser | Asn |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Ala | Cys | Cys | Gln | Ser | Thr | Val | Ala | Thr | Ser | Leu | Val | Gly | Val | Pro | Ile |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Met | Gly | Val | Ile | Tyr | Pro | Leu | Tyr | Phe | Val | Ala | Thr | Lys | Cys | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Ser | Ala | Val | Arg | Gln | Glu | Ala | Ile | Asp | Leu | Leu | Ser | Ser | Ala | Pro |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Cys | Pro | Asp | Val | Val | Trp | Glu | Ala | Pro | Ile | Leu | Thr | Ala | Val | Ser | Pro |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Arg | Ala | Lys | Glu | Ile | Glu | Glu | Leu | Gly | Leu | Asp | Glu | Asn | Glu | Pro | Ile |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Pro | Glu | Phe | Lys | Lys | Leu | His | Gly | Leu | Gly | Trp | Gly | Ile | Asp | Tyr | Glu |
|     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| Thr | Arg | Gln | Val | Ser | Val | Gln | Phe | Arg | Arg | Thr | Thr | Asn | Xaa | Met | Asp |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Arg | Glu | Trp | Asp | Gln | Leu | Lys | Glu | Cys | Leu | Thr | Trp |     |     |     |     |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     |     |

&lt;210&gt; 43314

&lt;211&gt; 143

<212> PRT  
 <213> A.fumigatus

<400> 43314

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Tyr | Asp | Phe | Asp | Ser | Cys | Ile | Met | Gly | Asn | Thr | Thr | Ser | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Ala | Gly | Arg | Asp | Cys | Leu | Leu | Ser | Ala | Val | Gly | Gly | Asn | His | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| His | Val | Ala | Phe | Gln | Asp | Gln | Leu | Leu | Tyr | Gln | Ala | Thr | Ala | Val | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Tyr | Asn | Val | Asn | Ile | Pro | Val | Thr | Pro | Ala | Ala | Val | Thr | Tyr | Pro |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gln | Ser | Ala | Asp | Glu | Val | Ala | Ala | Val | Val | Lys | Cys | Ala | Ala | Asp | Tyr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Gly | Tyr | Lys | Val | Gln | Ala | Arg | Ser | Gly | Gly | His | Ser | Phe | Gly | Asn | Tyr |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Gly | Met | Tyr | Ala | Leu | Asn | Cys | Tyr | Gly | Gly | Ser | Ser | Gln | Pro | Pro | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Ser | Pro | Leu | Thr | Cys | Leu | Cys | Ser | Arg | Pro | Arg | Arg | Arg | Gly | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | His | Arg | Gly | Arg | His | Glu | Ala | Leu | Arg | Pro | Ile | Leu | His | Gly |     |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |

<210> 43315

<211> 81

<212> PRT

<213> A.fumigatus

<400> 43315

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Ser | Val | Gln | Gly | Leu | Gly | Gly | Glu | Asp | Gly | Ala | Ile | Val | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Met | Lys | His | Phe | Asp | Gln | Phe | Ser | Met | Asp | Glu | Ser | Thr | Tyr | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Thr | Ile | Gly | Pro | Gly | Ile | Thr | Leu | Gly | Asp | Leu | Asp | Thr | Ala | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Asn | Ala | Gly | His | Arg | Ala | Met | Ala | His | Gly | Ile | Cys | Pro | Thr | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Arg | Thr | Gly | Gly | His | Leu | Ser | Ile | Ile | Arg | His | Glu | Val | Lys | Asp | Pro |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43316

<211> 94

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (23), (82)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43316

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Thr | Leu | Ser | Val | Ser | Pro | Gly | Ala | Thr | Gly | Arg | Pro | Thr | Thr | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Thr | Thr | Thr | Ala | Ala | Xaa | Thr | Thr | Ser | Gln | Thr | Thr | Thr | Lys | Pro |

| Variable              | Mean | SD   | Min  | Max  | Median | Q1   | Q3   | Mode | Skewness | Kurtosis | Shapiro-Wilk | Normality |
|-----------------------|------|------|------|------|--------|------|------|------|----------|----------|--------------|-----------|
| Age                   | 35.2 | 12.5 | 18   | 65   | 32     | 28   | 38   | 35   | 0.15     | 2.8      | 0.98         | Normal    |
| Gender                | 1.2  | 0.4  | 1    | 2    | 1      | 1    | 1    | 1    | 0.05     | 0.5      | 0.95         | Normal    |
| Education             | 12.5 | 2.1  | 9    | 16   | 12     | 11   | 13   | 12   | 0.10     | 1.5      | 0.99         | Normal    |
| Income                | 4500 | 1500 | 2000 | 8000 | 4000   | 3500 | 5000 | 4500 | 0.20     | 3.5      | 0.97         | Normal    |
| Marital Status        | 1.5  | 0.5  | 1    | 2    | 1      | 1    | 1    | 1    | 0.05     | 0.5      | 0.95         | Normal    |
| Occupation            | 2.5  | 1.2  | 1    | 4    | 2      | 2    | 3    | 2    | 0.10     | 1.5      | 0.99         | Normal    |
| Health Status         | 1.8  | 0.6  | 1    | 2    | 1      | 1    | 1    | 1    | 0.05     | 0.5      | 0.95         | Normal    |
| Stress Level          | 3.2  | 1.5  | 1    | 5    | 3      | 2    | 4    | 3    | 0.15     | 2.8      | 0.98         | Normal    |
| Life Satisfaction     | 4.5  | 1.0  | 3    | 5    | 4      | 4    | 4    | 4    | 0.05     | 0.5      | 0.95         | Normal    |
| Work-Life Balance     | 3.8  | 1.2  | 2    | 5    | 3      | 3    | 4    | 3    | 0.10     | 1.5      | 0.99         | Normal    |
| Family Support        | 4.2  | 0.8  | 3    | 5    | 4      | 4    | 4    | 4    | 0.05     | 0.5      | 0.95         | Normal    |
| Community Involvement | 2.8  | 1.1  | 1    | 4    | 2      | 2    | 3    | 2    | 0.10     | 1.5      | 0.99         | Normal    |
| Personal Growth       | 3.5  | 1.3  | 2    | 5    | 3      | 3    | 4    | 3    | 0.15     | 2.8      | 0.98         | Normal    |
| Overall Well-being    | 4.0  | 0.9  | 3    | 5    | 4      | 4    | 4    | 4    | 0.05     | 0.5      | 0.95         | Normal    |

<210> 43317

<211> 125

&lt;212&gt; PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

 $\langle 222 \rangle$  (125)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43317

<210> 43318

<211> 103

&lt;212&gt; PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

$\langle 222 \rangle$  (48), (95)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43318

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Arg | Gly | Thr | Ile | Arg | Pro | Val | Glu | Thr | Gly | Arg | Ser | Asn | Trp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Leu | Leu | Pro | Thr | Leu | Ile | Gln | Thr | Pro | Trp | Ala | Pro | Tyr | Ile | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Thr | Lys | Arg | Ile | Leu | Val | Ala | Pro | Pro | Cys | Leu | Ala | Ala | Ser | Xaa |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Arg | Thr | Leu | Gly | Arg | Val | Ile | Trp | Lys | Leu | Asp | Ala | Glu | Pro | Ala |

## 19548

50                      55                      60  
 Ser Val Ile Gly Val Arg Trp Leu Thr Lys Ile Phe Val Ala Gly Asp  
 65                      70                      75                      80  
 Val Ile Ser Phe Leu Leu Gln Cys Gly Gly Asn Arg His His Xaa Val  
                     85                      90                      95  
 Leu Ser Val Pro Asp Thr His  
                     100

<210> 43319  
 <211> 152  
 <212> PRT  
 <213> A.fumigatus

<400> 43319  
 Tyr Thr Thr Gly Gly Gly Tyr Met Ala Ala Gly Thr Leu Glu Ala Met  
 1                      5                      10                      15  
 Lys Asn Gly Glu His Ile Val Ile Ala Gly Leu Ala Ile Gln Leu Leu  
                     20                      25                      30  
 Trp Phe Gly Phe Phe Ile Val Val Ala Ser Leu Phe His Trp Arg Val  
                     35                      40                      45  
 Val Arg His Pro Lys Tyr Thr Ile Ser Asn Asp Leu Arg Ser Gln Gly  
                     50                      55                      60  
 Ser Gly Ile Ser Trp Ser Thr Leu Met Trp Ala Leu Tyr Ala Ala Cys  
 65                      70                      75                      80  
 Val Leu Ile Leu Val Arg Ser Ile Phe Arg Val Val Glu Phe Val Gln  
                     85                      90                      95  
 Gly Asn Ala Gly Phe Ile Met Arg His Glu Tyr Leu Leu Tyr Val Phe  
                     100                      105                      110  
 Asp Ala Val Leu Met Ala Leu Thr Gly Ile Val Leu Gly Leu Val Phe  
                     115                      120                      125  
 Pro Gly Ser Phe Val Ser Arg Arg Ser Arg Cys Ala Asp Asp Ala Val  
                     130                      135                      140  
 Pro Leu Gly Ser Gln Leu Ser Arg  
 145                      150

<210> 43320  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5), (11), (13)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43320  
 Leu Ser Arg Ser Xaa Pro Ser Cys Gly Lys Xaa Pro Xaa Val Ala Arg  
 1                      5                      10                      15  
 Tyr Met Pro His Val Arg Lys Ala Arg Glu Glu Asp Leu Lys Glu Gly  
                     20                      25                      30  
 Lys Ile Thr Arg Gln Glu Tyr Asp Ala Ile Glu Ser Leu Glu Arg Asn  
                     35                      40                      45  
 His Ile Arg Tyr Gly Ser Ile Ala Asp Ser Glu Ser Asp Ala Tyr Glu  
                     50                      55                      60  
 Arg Asn Ser Asn Ile Ser Thr Ala His Ser Asn Ile Gly Tyr Leu Phe  
 65                      70                      75                      80

# 19549

Thr Leu Ala Leu Asn Leu Ser Val Leu Leu Pro Leu Gln Asn Asn Thr  
                     85                    90                    95  
 Tyr Ser Asn Asn Leu Ala Leu Cys Leu Thr Asn Ser Cys Lys  
                     100                    105                    110

<210> 43321  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (16)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43321  
 Arg Leu Leu Asp Trp Val Val Leu Gly Val Trp Trp Phe Ile Phe Xaa  
 1                    5                    10                    15  
 Gln Lys Arg Pro Gly Pro Gln Val Pro Lys Gly Ser Asn Tyr Ala Thr  
                     20                    25                    30  
 Ile Gly Phe Lys Gln Ile Trp Leu Ala Leu Arg Glu Val Arg Ser Leu  
                     35                    40                    45  
 Pro Gln Thr Phe Leu Tyr Phe Ile Ala Tyr Phe Leu Leu Ala Asp Gly  
                     50                    55                    60  
 Leu Asn Thr Thr Gly Glu Cys Ser Gln Pro  
 65                    70

<210> 43322  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (4)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43322  
 Val Thr Leu Xaa Ser Phe Asp Pro Gly Leu Val Lys Thr Ala Pro Pro  
 1                    5                    10                    15  
 Pro Arg Arg Thr Tyr Gln Asp Pro Ala His Pro Glu Leu Thr Gln Ile  
                     20                    25                    30  
 Met Leu Glu Asp Glu Ser Gly Arg Leu Arg Leu Thr Gly Ser Leu Leu  
                     35                    40                    45  
 Thr Ser Thr Gln Leu Ala Thr Gly Val Ile Ile Ala Val Leu Gly Thr  
                     50                    55                    60  
 Glu Asn Ala Asn Gly Asp Phe Glu Thr Ile Asp Ile Arg Val Pro Asp  
 65                    70                    75                    80  
 Leu Pro Pro Gln Pro Arg Arg Trp Glu Arg Asn Glu Asn Arg Thr Glu  
                     85                    90                    95  
 Thr Lys Glu Pro Arg Lys Ser Lys Ile Ala Phe Val Ser Gly Leu Gly  
                     100                    105                    110  
 Ile Thr Gly Thr Ser Ser Asp Thr Leu Ala Leu Glu Leu Leu Ala Asp  
                     115                    120                    125  
 Tyr Leu Leu Gly Tyr Thr Gly Ser Asp Ala Ser Ser Ile Thr Arg Leu  
                     130                    135                    140

## 19550

Ile Ile Ala Gly Asn Ser Leu Gly Ala Asn Val Thr Ala Glu Ala Ala  
 145 150 155 160  
 Ala Thr Asp Met Glu Met Gly Thr Ala Ala Lys Lys  
 165 170

&lt;210&gt; 43323

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43323

Tyr Cys Thr Thr Xaa Thr Asn Asn His Gln Pro Pro Thr Ser Phe Lys  
 1 5 10 15  
 Leu Tyr Ala Ala His Ile Leu Ser Met Leu Ser Met Gln Lys Thr Pro  
 20 25 30  
 Thr Phe Ile Leu Pro Pro Thr Ala Asn Leu Asn Asn His Asn Pro His  
 35 40 45  
 Gly Ile Gln Ser Asn Pro Thr Ala Glu His Arg Asn Ser Thr Arg Ala  
 50 55 60  
 Leu Ser Leu Ser Glu Ile Pro Ala Phe Pro Asp Gly Pro Ser Met Gly  
 65 70 75 80  
 Asp Gly Leu Ser Arg His Glu Ser Ile Ser Thr Asp Gly Thr Ser Asn  
 85 90 95  
 Asp Ser Pro Glu Ser Trp Asp Gly Glu Ser His Ser Asp Ser Cys Pro  
 100 105 110  
 Ser Val Asp Tyr Glu Ile Lys Ile His Asp Gly Ser Tyr Pro Val  
 115 120 125

&lt;210&gt; 43324

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (166)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43324

Thr Ala Asn Ala Ser Ser Leu Leu Ala Thr Leu Asn Leu Arg Pro Gly  
 1 5 10 15  
 Pro Glu Ala Gln Lys Ser Tyr Arg Tyr Tyr Leu Cys Arg Phe Asn Trp  
 20 25 30  
 Trp Arg Tyr Ser Ala Thr Ser Ile Phe Lys Pro Leu Phe Thr Tyr Leu  
 35 40 45  
 Pro Val Gln Asn Ser Ala Asn Val Val Asn Ser Ala Ala Met Ser Arg  
 50 55 60  
 His His Pro Asp Leu Val Met Cys Arg Lys Gln Pro Gly Ile Ser Ile  
 65 70 75 80  
 Gly Arg Leu Cys Asp Lys Cys Asp Gly Lys Cys Pro Val Cys Asp Ser  
 85 90 95

## 19551

Tyr Val Arg Pro Thr Thr Leu Val Arg Ile Cys Asp Glu Cys Ser Phe  
                   100                  105                  110  
 Gly Asn Tyr Gln Asn Lys Cys Ile Val Cys Gly Gly Glu Gly Ile Ser  
                   115                  120                  125  
 Asp Ala Phe Tyr Cys Phe Glu Cys Thr Arg Leu Glu Lys Asp Arg Glu  
                   130                  135                  140  
 Arg Cys Pro Lys Ile Ile Asn Leu Gly Ser Ser Arg Thr Asp Leu Phe  
 145                  150                  155                  160  
 Tyr Gln Lys Lys Ser Xaa Arg Asn His  
                   165

<210> 43325  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 43325  
 Lys Val Thr Ser Leu Val Lys Leu Leu Asn Asn Ile Leu Thr Ile Ser  
 1                  5                  10                  15  
 Tyr Pro Ala Gln Cys Thr Gln Lys Asn Pro Arg Ser Tyr Phe Ser Ile  
                   20                  25                  30  
 Ser Ser Gly Pro Val Ser Ile Ser Asn Ile Met Ala Arg Leu Tyr Ile  
                   35                  40                  45  
 Cys Tyr His Ile Phe Thr Thr Thr Asp Lys Val Arg Ile Met Leu Lys  
 50                  55                  60

<210> 43326  
 <211> 159  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (143), (144)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43326  
 Lys Asn Ser Ala Pro Arg Gln Ser Ser Ser Ser Thr Arg Arg Ser Lys  
 1                  5                  10                  15  
 Ser Lys Ser Lys Ser Thr Asp Lys Pro Ala Tyr Glu Val Glu Tyr Val  
                   20                  25                  30  
 Pro Arg Thr His Gln Leu Ile Glu Ser Arg Pro Ser Ser Thr Leu Thr  
                   35                  40                  45  
 Pro Thr Ser Thr Ser Thr Thr Ser Thr Ser Thr Ser Thr Ser Leu Ser  
                   50                  55                  60  
 Arg Arg Leu Ser Ile Arg Leu Thr Pro Arg Ser Arg Cys Ser Arg Ser  
 65                  70                  75                  80  
 Tyr Cys Asp Thr Thr Glu Arg Gln Pro Leu Val Lys Arg Arg Ala Gln  
                   85                  90                  95  
 Phe Ala Tyr Lys Pro Ile His Gln Asp Tyr Leu Ser Glu Val Ala Lys  
                   100                  105                  110  
 Lys Thr Ala Ala Ala Pro Arg Ile Thr Ser Asn Ser Val Gly Glu Arg  
                   115                  120                  125  
 Pro Ile Ser Pro Ser Pro Thr Pro Pro Ser Ser Leu Glu Ala Xaa Xaa  
                   130                  135                  140  
 Ser Pro Ser Trp Ser Arg Phe Arg Tyr Ile Pro Ala Arg Pro Gln

## 19552

145

150

155

&lt;210&gt; 43327

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43327

Phe Pro Thr Ala Trp Arg Lys Thr Gly Gly Glu Ser His Ser Gly Asn  
 1 5 10 15  
 Gly Ala Arg Thr Ala Ser Phe Asp Arg Glu Ser Gly Thr Glu Asn Met  
 20 25 30  
 Phe Glu Ala Ser Met Asp Val Leu Asp Val Glu Ala Gln Gly His Thr  
 35 40 45  
 Ala Trp Met Thr Ser Ala Leu Glu Phe Tyr Cys Val Ser Lys Ala  
 50 55 60  
 Thr Asp Ile Leu Asn Ala Arg Glu Gly Ser Gln Met Arg Tyr Thr Arg  
 65 70 75 80  
 Asp Ser Pro Glu Val Gln His Leu Ala Lys Lys Met Tyr Ala His Gln  
 85 90 95  
 Ser Gln Leu Leu Ser Thr His Gly Met Leu Pro Gly Gly Ile Glu Ser  
 100 105 110  
 Asp Glu Cys Glu Glu Arg Arg Gln Arg Tyr Arg Glu Thr Ile Asp Gly  
 115 120 125  
 Ile Gly Leu Gln Ala Leu Lys Gly Leu Asn Leu Asp Asp Ile Pro Lys  
 130 135 140  
 Gln Thr Pro Ser Leu Asp Ala Thr Lys Asp Val Val Leu Ala Ser Lys  
 145 150 155 160  
 Ala Ser Asn Arg Met Gln Val His Val Lys Thr Asp Phe Ala Arg Pro  
 165 170 175  
 Ala Gln Met Arg Arg Gln Tyr Ser Gly Leu Leu Gly Phe Arg Glu Gln  
 180 185 190  
 Asp Ala Gly Arg Gly Asp Ala His Ala Pro Glu His Gln Pro Phe Ala  
 195 200 205  
 Leu Leu Gly Ser Ser Pro Val Ser Phe Pro Leu Phe Arg Pro Asn Pro  
 210 215 220  
 Pro Pro Pro Thr Pro Ala Ile Ser Arg Tyr Ala Thr Glu Phe Ser Glu  
 225 230 235 240  
 Val Arg Val Leu Gly Arg Gly Ser Phe Gly Glu Val Tyr His Val Lys  
 245 250 255  
 Asn His Ile His Gly Gln Asn Tyr Ala Ile Tyr Trp Thr Thr Gly  
 260 265 270

&lt;210&gt; 43328

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43328

Val Ala Ala Phe Asn Ala Phe Ile Gly Thr Thr Val Ile Val Ala Gln  
 1 5 10 15  
 Ile Ser Phe Ala Val Pro Ala Ala Leu Leu Ile Tyr Arg Arg Arg Ser  
 20 25 30  
 His Glu Tyr Leu Pro Pro Ser Arg Pro Phe Lys Val Met His Val Val  
 35 40 45  
 Gly Tyr Val Cys Asn Val Met Thr Val Val Trp Ala Val Val Ile Thr



## 19553

|   |    |    |    |    |
|---|----|----|----|----|
| 50  |    | 55 |    | 60 |
| Ile Phe Ser Thr Phe Pro Thr Thr Phe Pro Val Thr Gly Gly Asn Met |    |    |    |    |
| 65  | 70 | 75 | 80 |    |
| Ser Met Ser Ser Phe Leu Pro Pro Arg Phe Arg Tyr Gly Phe Ile Cys |    |    |    |    |
|   | 85 | 90 | 95 |    |
| Cys Gly Cys Gly   |    |    |    |    |
| 100   |    |    |    |    |

&lt;210&gt; 43329

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (39), (40)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43329

|   |    |    |    |  |
|---|----|----|----|--|
| Xaa Gly His Gly Gly Cys Lys His Gly Glu Lys Asn Asp Arg Arg Arg |    |    |    |  |
| 1   | 5  | 10 | 15 |  |
| Pro Gly Glu Met Ala Gln Asn Asp Trp Arg Arg Lys Pro Asp Glu Ile |    |    |    |  |
|   | 20 | 25 | 30 |  |
| Asn Asn Thr Val Asn Val Xaa Xaa Asn Glu Thr His Pro Met Asn Gly |    |    |    |  |
|   | 35 | 40 | 45 |  |
| Lys Thr Ala Pro Arg Thr Lys Arg Pro Ser Arg Ala Ile Lys Leu     |    |    |    |  |
| 50  | 55 | 60 |    |  |

&lt;210&gt; 43330

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43330

|   |    |    |    |  |
|---|----|----|----|--|
| Ser Ser Glu His Pro His Asn Thr Thr Asp Val Val Ser Asn Trp Arg |    |    |    |  |
| 1   | 5  | 10 | 15 |  |
| Arg Leu Tyr Lys Tyr Val Val Arg Cys Ile Ile Lys Cys Ser Arg Arg |    |    |    |  |
|   | 20 | 25 | 30 |  |
| Pro Ala Val Glu His Pro Ala Glu Thr Glu Thr His Pro Ser Asp Gln |    |    |    |  |
|   | 35 | 40 | 45 |  |
| Ile Thr Thr Asn Asp Ile Trp His Phe Asn Asn Gly Ala Val Ser Leu |    |    |    |  |
| 50  | 55 | 60 |    |  |
| Val Ser Ser Met Cys His Ser Val Ser His Cys Ala Gln His Phe     |    |    |    |  |
| 65  | 70 | 75 |    |  |

&lt;210&gt; 43331

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (14), (108)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43331

## 19554

Asn Gly Ala Tyr Asn Gln Gly Gly Tyr Phe Met Ala Asn Xaa Tyr Pro  
 1 5 10 15  
 Pro Gln Tyr Phe Gln Ala Pro Asn Ser Gln Gln Gln Gln Gln Gln Pro  
 20 25 30  
 Gln Gln Pro Gln Gln His Asn Leu Ala Ser Leu Gln Pro Thr Tyr Gln  
 35 40 45  
 Thr Arg Met Ala Tyr Asn Ala Asn Asp Gly Thr Asn Gly Leu Ile Gln  
 50 55 60  
 Gln Phe Ser Asn Gln Asp Leu Asn Ser Thr Arg Thr Gly Phe Phe Gly  
 65 70 75 80  
 Arg Ala Ala Ser Pro Ala Gln Arg Pro Arg Thr Ala Gly Phe Ser Ala  
 85 90 95  
 Pro Gly Gln Gln Gln Pro Gly His Leu Ala Pro Xaa Met Pro Arg Ser  
 100 105 110  
 Pro Arg Thr Pro Ala Glu Asn Glu Glu Leu Gln Arg Tyr Pro Glu Arg  
 115 120 125  
 Tyr Ser Glu Asn Val His Lys Arg Gly Lys Ala Ala Lys Glu Leu Val  
 130 135 140  
 Asn Val Phe Phe His Glu Asn Ile Glu Arg Ala Arg Asp Arg Asn Met  
 145 150 155 160  
 Arg Leu Ala Pro Ala Gly Leu Glu Arg Pro Ala Leu  
 165 170

<210> 43332  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 43332  
 Arg Val Gln Trp Asp Ser Asn Ser Leu Trp Glu Ser Arg Tyr Ile Trp  
 1 5 10 15  
 Leu Pro Met Asp Ile Asp Glu Asn Lys Thr Leu Asp Leu Val Trp  
 20 25 30  
 Asn Asp Val Tyr Asp Leu Asn Val Tyr Val Val His Gln Leu Phe Lys  
 35 40 45  
 Glu Ile Leu Thr Gly Pro Ala Lys Pro Gly Ser Gly Lys Pro Ser Ala  
 50 55 60  
 Ala Arg His Thr Leu Pro Lys Arg Pro Arg Arg Thr Ala Met Arg Ile  
 65 70 75 80  
 Asn Arg Lys Leu Tyr Val Leu His Arg Arg  
 85 90

<210> 43333  
 <211> 114  
 <212> PRT  
 <213> A.fumigatus

<400> 43333  
 Ile Gly Pro Lys Ser Pro Tyr Leu Phe Leu Ser Leu Ile Ser Ser Phe  
 1 5 10 15  
 Lys Phe Ser Leu Pro Phe Gln Pro Ala Thr Leu Leu Ile Leu Glu Met  
 20 25 30  
 Ala Glu Asp Lys Ala Pro Arg Pro Thr Met Asp Pro Lys Leu Glu Lys  
 35 40 45  
 His Ala His Asp Ala Asp Glu Ala Met Lys Ala Phe Glu Gly Met Glu  
 50 55 60

## 19555

Gly Glu Ser Ile Thr Leu Asp Glu Glu Thr Asn Lys Arg Leu Leu Lys  
 65 70 75 80  
 Ile Ile Asp Trp His Met Met Pro Ile Met Cys Val Val Tyr Gly Met  
 85 90 95  
 Asn Tyr Leu Asp Ser Ile Gly Gln Arg Ile Ile Arg Glu His Ser Asn  
 100 105 110  
 Lys Asn

<210> 43334  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 43334  
 Thr Ala Val Trp Met Asn Tyr Gln Ser Ile Thr Met Ala Ala Ser Ala  
 1 5 10 15  
 Pro Asp Asn Gly His Arg Ser His Pro Ser Gln Gln Ala Gly Ser Thr  
 20 25 30  
 Ile Pro Arg Ser Ser Glu Gly His Glu Glu Arg Ser Pro Gly Tyr Arg  
 35 40 45  
 Asp Glu Asp Phe Gly Ala Glu Leu Glu Met Glu Arg Ser Ser Arg Thr  
 50 55 60  
 Ser Pro Gln Ser Phe Thr Pro Arg Ser Leu Phe Val Gly Leu Val Ile  
 65 70 75 80  
 Gly Ala Leu Ile Thr Phe Ser Asn Thr Tyr Phe Gly Leu Gln Thr Gly  
 85 90 95  
 Trp Ile Ser Thr  
 100

<210> 43335  
 <211> 100  
 <212> PRT  
 <213> A.fumigatus

<400> 43335  
 Glu Pro Asp Pro Leu Arg Ala Val Gln Ile Gly Leu Asp Met Asp Ile  
 1 5 10 15  
 Val Thr Ser Ser His Pro Gly Asp Val Met Ala Ala Ala Gly Ile Glu  
 20 25 30  
 His Arg Thr Phe Asn Ala Leu Pro Gln Asp Met Leu Arg Ala Val Pro  
 35 40 45  
 Gly Val Thr Pro Lys Val Leu Glu Arg Leu Ile Leu Glu Thr Gly Asn  
 50 55 60  
 Ile Ser Glu Ile Ala Asn Met Asp Val Glu Gln Leu Asp Pro Leu Ile  
 65 70 75 80  
 Gly Arg Glu Ala Ala Arg Lys Ile Val Gly Phe Phe Arg Lys Asn Leu  
 85 90 95  
 Phe Asp Ser Ser  
 100

<210> 43336  
 <211> 196  
 <212> PRT  
 <213> A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (196)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43336

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Ser Leu Xaa Ser Lys Asn Met Arg Thr Lys Leu Val Asp Ala Leu Asn
1           5           10           15
Leu Trp Phe Gln Leu Pro His His Leu Val Asp Thr Val Lys Gly Thr
           20           25           30
Val Asp Asp Leu His Asn Ser Thr Leu Ile Leu Asp Asp Ile Gln Asp
           35           40           45
Ser Ser Tyr Leu Arg Arg Gly Phe Ala Ala Thr His His Val Phe Gly
           50           55           60
Ser Ala Gln Cys Ile Asn Ser Ala Thr Tyr Leu Leu Val Gln Ala Ala
65           70           75           80
Ser Arg Leu Ser Val His Asn Glu Gln Tyr Pro Ala Val Ile Thr Val
           85           90           95
Phe Leu Asp Gly Leu Lys Glu Leu Ser Leu Gly Gln Ser Trp Asp Leu
           100          105          110
Asn Trp Arg Ser Thr Gly Tyr Cys Pro Ser Thr Glu Glu Tyr Met Ala
           115          120          125
Met Val Asp Gly Lys Thr Gly Val Met Phe Asp Met Ile Val Arg Met
           130          135          140
Met His Cys Phe Ser Ser Ser Gln Thr Val Pro Val Ser Glu Leu Ser
145          150          155          160
Gln Leu Thr Gln Leu Leu Gly Arg Trp Tyr Gln Val Arg Asp Asp Tyr
           165          170          175
Gln Asn Leu His Asp Glu Gln Pro Ser Pro Gln Arg Arg Arg Thr Ala
           180          185          190
Gln Ser Pro Xaa
           195

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&lt;210&gt; 43337

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43337

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Val Gly Gly Gly Val Leu Ser Asp Cys Phe Lys Pro Glu Glu Arg Gly
1           5           10           15
Lys Ser Val Ala Ile Tyr Ser Leu Ala Pro Ile Leu Gly Pro Ala Val
           20           25           30
Gly Pro Ile Val Gly Gly Phe Ile Ser Gln Asp Thr Thr Trp Arg Trp
           35           40           45
Val Phe Tyr Ala Thr Ser Ile Ala Asp Gly Ala Ile Gln Ile Gly Gly
           50           55           60
Leu Phe Phe Ile Arg Glu Thr Tyr Ala Pro Lys Ile Leu Lys Arg Arg
65           70           75           80
Ala Glu Arg Ile Arg Lys Glu Thr Gly Asp Ser Ala Tyr Gln Thr Glu
           85           90           95
Thr Glu Arg Gln Asn Lys Thr Leu Ser Gln Thr Met Gln Thr Ala Leu
           100          105          110
Val Arg Pro Phe Arg Ile Leu Ser Thr Gln Pro Ile Val Gln Val Leu
           115          120          125
Ala Met Tyr Met Ala Phe Ile Tyr Gly Ala Leu Tyr Val Pro Leu Leu

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## 19557

130 135 140  
 Thr Ile Arg Pro Arg Ala Pro Lys Tyr Ala  
 145 150

<210> 43338  
 <211> 116  
 <212> PRT  
 <213> A.fumigatus

<400> 43338  
 Tyr Tyr Ala Pro Gly Gly Gln Leu Val His Pro Arg Gly Val Val Ser  
 1 5 10 15  
 Asn Glu Thr Glu Arg Ala Lys Ala Asn Ser Lys Val Thr Glu Glu Leu  
 20 25 30  
 Thr His Ala Leu Val His Lys Gly Phe Met Val Asp Phe Ala Pro Pro  
 35 40 45  
 Ser Gly Asp Glu Asp Ala Ala Gly Asp Gly Lys Phe Phe Arg Cys Val  
 50 55 60  
 Val Asn Val Gln Thr Thr Arg Glu Thr Val Glu Ala Leu Val Arg Ala  
 65 70 75 80  
 Ile Glu Glu Ala Gly Pro Ala Ile Ile Glu Arg Leu Lys Ala Glu Ala  
 85 90 95  
 Ala Ser Val Pro Lys Arg Arg Pro Gly Glu Arg Gly His Gly Pro Val  
 100 105 110  
 Val His Gln Gly  
 115

<210> 43339  
 <211> 81  
 <212> PRT  
 <213> A.fumigatus

<400> 43339  
 Ala Gly Ser Phe Trp Ile Asp Phe Leu Phe Ile Tyr Leu Cys Thr Ile  
 1 5 10 15  
 Cys Leu Thr Ala Gln Phe Arg Leu Phe Ala Ala Ala Ser Pro Asn Phe  
 20 25 30  
 Glu Val Ala Leu Arg Tyr Ser Gly Val Ser Val Leu Phe Cys Ile Val  
 35 40 45  
 Phe Gly Gly Tyr Val Leu Ser Val Asp Lys Met Met Asn Tyr Val Pro  
 50 55 60  
 Trp Val Gly Trp Ile Ala Val Ser Thr Ile Arg Asn Asn Leu Ser Gly  
 65 70 75 80  
 Arg

<210> 43340  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 43340  
 Tyr Thr Thr Pro Ala Leu Tyr Thr Tyr Glu Ala Met Met Ala Ala Glu  
 1 5 10 15  
 Phe His Asp Thr Lys Phe Ser Cys Ala Pro Gly Ala Val Ile Pro Ser  
 20 25 30

[illegible]

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<210> 43341
<211> 141
<212> PRT
<213> A.fumigatus
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<210> 43342
<211> 171
<212> PRT
<213> A.fumigatus
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<400> 43342
Asn Ser Cys Ala Tyr Pro Ala Ser Pro Val Val Glu Asp Glu Ile Pro
1          5          10          15
Ala Gly Gly Thr Lys Ser Ser Pro Ser Asp Thr Gly Thr Glu Leu Val
20          25          30
Ser Ser Phe Lys Ala Ala Pro Ser Pro Gly Ser Asn Ile Ile Ile Asp
35          40          45
Gly Asp Leu Ile Ile Asp Met Gly Ser Pro Pro Pro Ser Arg Pro Ala
50          55          60
Tyr Arg Val Asn Pro Ala His Phe Ser Ser Asn Asn Thr Pro Gly Asn
65          70          75          80
Glu Glu Asp Asp Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
85          90          95
Met Glu Ala Leu Arg Leu Pro Ser Pro Val Gly His Gly Gly Ala Ser
100          105          110
Ser Glu Arg Val Glu Thr Ala Pro Pro Thr Gln Glu Glu Ile Glu Asp
115          120          125
Asp Asp Asp Ala Leu Ala Ala Glu Met Glu Ala Ala Phe Glu Glu Glu
130          135          140

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# 19559

Ala Arg Lys Gln Glu Tyr Gln Pro Pro Ser Leu Gln Tyr His Val Pro  
 145 150 155 160  
 Ser Glu Asp Glu Ser Glu Val Ser Glu Glu Glu  
 165 170

<210> 43343  
 <211> 173  
 <212> PRT  
 <213> A.fumigatus

<400> 43343  
 Tyr Ser Tyr Pro Ser Thr Arg Arg Leu Arg Gln His Gly Ala Pro Glu  
 1 5 10 15  
 Leu Arg Gln Pro Arg Met Pro Leu Ser Pro Ser Thr Met Ser Thr Thr  
 20 25 30  
 Ser Val Leu Asp Gly Phe Ser Leu Leu Pro Met Thr Pro Pro Asp Leu  
 35 40 45  
 Val Asp Gly Val Pro Ser Met His Gln Asp Thr Ala Ala Val Thr Thr  
 50 55 60  
 Ala Ile His Val Ile Ser Thr Glu Arg Ala Ala Leu Ala Asn Leu Glu  
 65 70 75 80  
 Gln Ile Tyr Gln Thr Asp Arg Leu Ala Gln Glu Asn Leu Ala Arg Ala  
 85 90 95  
 Val Ser Arg Ile Val Arg Thr Val Arg Asn Gly Gly Lys Leu Val Val  
 100 105 110  
 Cys Gly Val Gly Lys Ser Gly Lys Ile Gly Gln Lys Leu Glu Ala Thr  
 115 120 125  
 Met Asn Ser Met Gly Ile Tyr Ser Ala Phe Leu His Pro Thr Glu Ala  
 130 135 140  
 Leu His Gly Asp Leu Gly Met Ile Arg Pro Val Arg Ile Phe Ala Ala  
 145 150 155 160  
 Phe Leu Gln Ser Leu Val Gly Glu Ser Gly Ile Val Tyr  
 165 170

<210> 43344  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (25)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43344  
 Leu Asn Gly Leu Arg Tyr Phe Val Pro Val Met Leu His Lys Cys Pro  
 1 5 10 15  
 Thr Leu Ala Phe Leu Gly Gln Gly Xaa Leu Leu Glu Leu Asn Ser Gln  
 20 25 30  
 Tyr Ser Thr Ser Thr Thr Glu Pro Arg Val Gln Ser Ser His Leu Gly  
 35 40 45  
 Leu Val His Lys Pro Ser Met Ile Ser Tyr Val Leu Thr Met Asn Cys  
 50 55 60  
 Asn Gly Ala His Gly  
 65

## 19560

<210> 43345  
 <211> 143  
 <212> PRT  
 <213> A.fumigatus

<400> 43345  
 His Ile Thr Leu Ser Lys Met Gly Ser Cys Phe Ser Thr Glu Ser Pro  
 1 5 10 15  
 Glu Asp Ala Glu Gln Lys Lys Arg Ser Gln Ala Ile Asp Arg Arg Leu  
 20 25 30  
 Glu Glu Asp Ser Arg Arg Leu Arg Arg Glu Cys Lys Ile Leu Leu Leu  
 35 40 45  
 Gly Gln Phe Trp Ile Ser Leu Ser Ile Ile Met Val Ile Val Pro Trp  
 50 55 60  
 Ala Asn Gly Ser Phe Pro Leu Ile Cys Asp Arg Val Arg Arg Glu Arg  
 65 70 75 80  
 Glu Ile Tyr Asn Cys Gln Ala Asn Glu Asn His Ser Ser Lys Arg Leu  
 85 90 95  
 His Ser Gly Gly Thr Cys Val Ile Ser Phe Asn Asp Leu Gln Lys Ser  
 100 105 110  
 Pro Arg Leu Arg Gln Ser Ser His Trp Ser Leu Pro Pro Ile Gln Pro  
 115 120 125  
 Pro Thr Asn Glu Ser Gln Ser Pro Arg Ile His Arg Val Pro Phe  
 130 135 140

<210> 43346  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 43346  
 Phe Ala Thr Gly Ser Gly Glu Ser Gly Lys Ser Thr Ile Val Lys Gln  
 1 5 10 15  
 Met Lys Ile Ile His Gln Asn Gly Tyr Thr Val Glu Glu Leu Ala Leu  
 20 25 30  
 Tyr Arg Leu Thr Ile Tyr Lys Asn Leu Leu Asp Cys Ala Lys Ala Leu  
 35 40 45  
 Ile Gly Ala Tyr His Gln Phe Asn Leu Gln Pro Thr Ser Pro Lys Val  
 50 55 60  
 Arg Glu Phe Ile Glu Cys Leu Ser Glu Tyr Asn Ile Asp Pro Asp Pro  
 65 70 75 80  
 Asn Thr Pro Leu Asp Pro Pro Ile Gly Asn Ala Val Thr Tyr Leu Trp  
 85 90 95  
 Asn Asp Pro Cys Thr Ser Thr Gly Val Arg Thr Thr Glu  
 100 105

<210> 43347  
 <211> 163  
 <212> PRT  
 <213> A.fumigatus

<400> 43347  
 Arg Val Pro Ala Thr Ile Ser Lys Ser Ala Asn Ser Arg Lys Lys Arg  
 1 5 10 15  
 Thr Gly Lys Val Gln Thr Glu Val Ser Lys Thr Thr Ala Lys Lys Pro  
 20 25 30



[illegible]

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<210> 43348
<211> 64
<212> PRT
<213> A.fumigatus
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<210> 43349
<211> 186
<212> PRT
<213> A.fumigatus
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 43349 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Glu         | Ala | Leu | Val | Leu | Pro | Ala | Pro | Val | Ala | Glu | Glu | Leu | Thr | Thr | Ala |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Val         | Ser | Thr | Thr | Ala | Ala | Gly | Asn | Gly | Ser | Leu | Thr | Ser | Gly | Cys | Leu |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Tyr         | Gln | Pro | Gly | Ala | Thr | Ser | Val | Ser | Gln | Val | Asn | Ser | Ser | Trp | Ala |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Gln         | Ser | Ser | Ser | Ile | Pro | Ile | Ile | Asn | Ser | Ser | Asp | Glu | Thr | Lys | Ala |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Leu         | Arg | Ala | Ile | Cys | Asp | Leu | Val | Val | Asn | Ser | Arg | Asp | Cys | Gly | Leu |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Ser         | Pro | Val | Leu | Ser | Asn | Thr | Leu | Phe | Asn | Lys | Thr | Ala | Asp | Ser | Asp |  |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Ala         | Glu | Pro | Tyr | Gln | Asn | Ile | Ser | Thr | Ser | Ala | Ser | Trp | Ser | Trp | Ala |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Ile         | Gly | Glu | Pro | Arg | Asp | Pro | Ser | Pro | Pro | Gly | Ile | Asp | Glu | Asp | Ser |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |

## 19562

Gln His Ile Glu Arg Cys Ala Val Met Asp Leu Ser Leu Gly Gly His  
 130 135 140  
 Trp Arg Ser Thr Asn Cys Ser Gln Glu Arg His Ala Ala Cys Arg Val  
 145 150 155 160  
 Gly Asn His Pro Phe Thr Trp Ser Leu Ser Ser Gly Ala Tyr Thr Tyr  
 165 170 175  
 Ser Asp Ala Phe Asp His Ala Cys Pro Glu  
 180 185

<210> 43350  
 <211> 180  
 <212> PRT  
 <213> A.fumigatus

<400> 43350  
 Gly Leu Thr Asn Leu Ile Ser Val Cys Gly Leu Thr Gly Val Glu Ser  
 1 5 10 15  
 Pro Ile Pro Pro Phe Gly Gly Ser Gly Asp Phe Asp Ile Ser Pro Ser  
 20 25 30  
 Ala Ile Val Phe Val Ala Lys Asp Pro Asn Leu Asn Pro Ala Thr His  
 35 40 45  
 Thr Ser Cys Ser Cys Tyr Tyr Cys Pro Met Phe Ser Trp Thr Gly Val  
 50 55 60  
 Gly Ala Leu Glu Ala Lys Val Cys Thr Val Lys Gly Leu Glu Gly Ala  
 65 70 75 80  
 Met Ser Ser Pro Val Leu Ser Ser Asp Gly Ser Ser Ile Ala Leu Leu  
 85 90 95  
 Gly Met Arg Glu Asp Gly Tyr Glu Ser Asp Lys Asn Arg Ile Leu Tyr  
 100 105 110  
 Val Pro Asn Pro Trp Asn Gly Glu Met Ile Glu Ile Phe Ala Ser Ala  
 115 120 125  
 Asp Gly Lys Gly Gln Trp Asp Leu Ser Pro Ser Gly Leu Thr Phe Ala  
 130 135 140  
 Lys Asp Asp Gln Ser Leu Phe Val Gln Val Glu Gln Gly Arg Gly  
 145 150 155 160  
 Val Leu Tyr Gln Leu Pro Leu Asp Lys Ser Val Phe Thr Thr Gly Leu  
 165 170 175  
 Glu Ile Thr Arg  
 180

<210> 43351  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (28)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43351  
 Ser Ala Asn Lys Pro Tyr Val Glu Pro Cys Thr Thr Gln Val Arg Ser  
 1 5 10 15  
 Arg Ser Ile Tyr Asp Pro Trp Phe Trp Ser Val Xaa Pro Gln Gln Thr  
 20 25 30  
 Val Ile Lys Ala Val Met Asp Tyr Arg Ser Trp Ala Tyr His Thr Ile

| Year | Country | Population (millions) | Urban population (millions) | Urban population (%) | Population density (per sq km) | Urban population density (per sq km) | Population growth rate (%) | Urban population growth rate (%) | Population growth rate (per 1,000) | Urban population growth rate (per 1,000) | Population growth rate (per 1,000) | Urban population growth rate (per 1,000) |
|------|---------|-----------------------|-----------------------------|----------------------|--------------------------------|--------------------------------------|----------------------------|----------------------------------|------------------------------------|--|------------------------------------|--|
| 1950 | Algeria | 4.0                   | 1.0                         | 25.0                 | 100                            | 100                                  | 1.5                        | 1.5                              | 15                                 | 15                                       | 15                                 | 15                                       |
| 1955 | Algeria | 4.2                   | 1.2                         | 28.6                 | 110                            | 110                                  | 1.6                        | 1.6                              | 16                                 | 16                                       | 16                                 | 16                                       |
| 1960 | Algeria | 4.5                   | 1.5                         | 33.3                 | 120                            | 120                                  | 1.7                        | 1.7                              | 17                                 | 17                                       | 17                                 | 17                                       |
| 1965 | Algeria | 4.8                   | 1.8                         | 37.5                 | 130                            | 130                                  | 1.8                        | 1.8                              | 18                                 | 18                                       | 18                                 | 18                                       |
| 1970 | Algeria | 5.1                   | 2.1                         | 41.2                 | 140                            | 140                                  | 1.9                        | 1.9                              | 19                                 | 19                                       | 19                                 | 19                                       |
| 1975 | Algeria | 5.4                   | 2.4                         | 44.4                 | 150                            | 150                                  | 2.0                        | 2.0                              | 20                                 | 20                                       | 20                                 | 20                                       |
| 1980 | Algeria | 5.7                   | 2.7                         | 47.4                 | 160                            | 160                                  | 2.1                        | 2.1                              | 21                                 | 21                                       | 21                                 | 21                                       |
| 1985 | Algeria | 6.0                   | 3.0                         | 50.0                 | 170                            | 170                                  | 2.2                        | 2.2                              | 22                                 | 22                                       | 22                                 | 22                                       |
| 1990 | Algeria | 6.3                   | 3.3                         | 52.3                 | 180                            | 180                                  | 2.3                        | 2.3                              | 23                                 | 23                                       | 23                                 | 23                                       |
| 1995 | Algeria | 6.6                   | 3.6                         | 54.5                 | 190                            | 190                                  | 2.4                        | 2.4                              | 24                                 | 24                                       | 24                                 | 24                                       |
| 2000 | Algeria | 6.9                   | 3.9                         | 56.5                 | 200                            | 200                                  | 2.5                        | 2.5                              | 25                                 | 25                                       | 25                                 | 25                                       |
| 2005 | Algeria | 7.2                   | 4.2                         | 58.3                 | 210                            | 210                                  | 2.6                        | 2.6                              | 26                                 | 26                                       | 26                                 | 26                                       |
| 2010 | Algeria | 7.5                   | 4.5                         | 60.0                 | 220                            | 220                                  | 2.7                        | 2.7                              | 27                                 | 27                                       | 27                                 | 27                                       |
| 2015 | Algeria | 7.8                   | 4.8                         | 61.5                 | 230                            | 230                                  | 2.8                        | 2.8                              | 28                                 | 28                                       | 28                                 | 28                                       |
| 2020 | Algeria | 8.1                   | 5.1                         | 63.0                 | 240                            | 240                                  | 2.9                        | 2.9                              | 29                                 | 29                                       | 29                                 | 29                                       |
| 2025 | Algeria | 8.4                   | 5.4                         | 64.3                 | 250                            | 250                                  | 3.0                        | 3.0                              | 30                                 | 30                                       | 30                                 | 30                                       |
| 2030 | Algeria | 8.7                   | 5.7                         | 65.5                 | 260                            | 260                                  | 3.1                        | 3.1                              | 31                                 | 31                                       | 31                                 | 31                                       |
| 2035 | Algeria | 9.0                   | 6.0                         | 66.7                 | 270                            | 270                                  | 3.2                        | 3.2                              | 32                                 | 32                                       | 32                                 | 32                                       |
| 2040 | Algeria | 9.3                   | 6.3                         | 67.7                 | 280                            | 280                                  | 3.3                        | 3.3                              | 33                                 | 33                                       | 33                                 | 33                                       |
| 2045 | Algeria | 9.6                   | 6.6                         | 68.8                 | 290                            | 290                                  | 3.4                        | 3.4                              | 34                                 | 34                                       | 34                                 | 34                                       |
| 2050 | Algeria | 9.9                   | 6.9                         | 69.7                 | 300                            | 300                                  | 3.5                        | 3.5                              | 35                                 | 35                                       | 35                                 | 35                                       |
| 2055 | Algeria | 10.2                  | 7.2                         | 70.6                 | 310                            | 310                                  | 3.6                        | 3.6                              | 36                                 | 36                                       | 36                                 | 36                                       |
| 2060 | Algeria | 10.5                  | 7.5                         | 71.4                 | 320                            | 320                                  | 3.7                        | 3.7                              | 37                                 | 37                                       | 37                                 | 37                                       |
| 2065 | Algeria | 10.8                  | 7.8                         | 72.2                 | 330                            | 330                                  | 3.8                        | 3.8                              | 38                                 | 38                                       | 38                                 | 38                                       |
| 2070 | Algeria | 11.1                  | 8.1                         | 73.0                 | 340                            | 340                                  | 3.9                        | 3.9                              | 39                                 | 39                                       | 39                                 | 39                                       |
| 2075 | Algeria | 11.4                  | 8.4                         | 73.7                 | 350                            | 350                                  | 4.0                        | 4.0                              | 40                                 | 40                                       | 40                                 | 40                                       |
| 2080 | Algeria | 11.7                  | 8.7                         | 74.4                 | 360                            | 360                                  | 4.1                        | 4.1                              | 41                                 | 41                                       | 41                                 | 41                                       |
| 2085 | Algeria | 12.0                  | 9.0                         | 75.0                 | 370                            | 370                                  | 4.2                        | 4.2                              | 42                                 | 42                                       | 42                                 | 42                                       |
| 2090 | Algeria | 12.3                  | 9.3                         | 75.6                 | 380                            | 380                                  | 4.3                        | 4.3                              | 43                                 | 43                                       | 43                                 | 43                                       |
| 2095 | Algeria | 12.6                  | 9.6                         | 76.2                 | 390                            | 390                                  | 4.4                        | 4.4                              | 44                                 | 44                                       | 44                                 | 44                                       |
| 2100 | Algeria | 12.9                  | 9.9                         | 76.7                 | 400                            | 400                                  | 4.5                        | 4.5                              | 45                                 | 45                                       | 45                                 | 45                                       |

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<210> 43352
<211> 85
<212> PRT
<213> A.fumigatus
```

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<210> 43353
<211> 98
<212> PRT
<213> A.fumigatus
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<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.
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<210> 43354
<211> 176
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 43354

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Pro | Asn | Gly | Gly | Tyr | Val | Gln | Val | Gln | Pro | Pro | Leu | Ile | Thr | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Asp | Cys | Glu | Gly | Ala | Gly | Glu | Thr | Phe | Thr | Val | Leu | Pro | Arg | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Ile | Met | Asp | Pro | Lys | Ser | Glu | Gly | Asn | His | Phe | Phe | Arg | Ala | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Tyr | Leu | Thr | Val | Ser | Ser | Gln | Leu | His | Leu | Glu | Ala | Tyr | Ala | Ala |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Leu | Gly | Asn | Val | Trp | Ala | Ile | Ser | Pro | Thr | Phe | Arg | Ala | Glu | Lys |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Asp | Thr | Pro | Arg | His | Leu | Ser | Glu | Phe | Tyr | Met | Leu | Glu | Ala | Glu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Met | Asn | Phe | Met | Asp | Asp | Leu | Asp | Ser | Leu | Thr | Asp | Ala | Val | Glu | Tyr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Val | Arg | Asp | Leu | Thr | Arg | Arg | Leu | Tyr | Gln | Ser | Pro | Val | Gly | Gln |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Glu | Ile | Leu | Thr | Ala | Lys | Arg | Ser | Gly | Glu | Ser | Gly | Gln | Asp | Asp | Ala |
|     |     | 130 |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| Gly | Asn | Gly | Ala | Val | Pro | Asn | Leu | Arg | Gln | Arg | Trp | Val | Asp | Leu | Met |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Glu | Gly | Pro | Arg | Trp | Arg | Arg | Ile | Thr | Tyr | Thr | Gln | Ala | Met | Glu | Leu |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |

&lt;210&gt; 43355

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (9), (35), (45)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43355

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Glu | Val | Gly | Asp | Val | Phe | Ser | Xaa | Val | Ser | Ser | Leu | Leu | Gly | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Thr | Lys | Asp | Lys | Lys | Gly | Lys | Pro | Asn | Thr | Val | Ser | Arg | Glu | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Ser | Xaa | Ala | Ala | Leu | Asn | Phe | Ala | Glu | Ala | Ser | Xaa | Trp | Phe | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Glu | Phe | Arg | Arg | Met | Lys | Gly | Ser | Leu | Thr | Lys | Gly | Ile | Ser | Ile |     |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43356

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18), (29), (55)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43356

Met Leu Ile Pro Phe Val Arg Leu Pro Phe Met Arg Arg Asn Ser Lys

## 19565

```

1           5           10           15
Asn Xaa Cys Asp Ala Ser Ala Lys Phe Lys Ala Ala Xaa Asp Val Phe
20           25           30
Ser Leu Glu Thr Val Phe Gly Leu Pro Phe Leu Ser Leu Val Lys Pro
35           40           45
Pro Ser Lys Leu Glu Thr Xaa Leu Asn Thr Ser Pro Thr Ser Leu Tyr
50           55           60
Asn Ser Leu
65

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&lt;210&gt; 43357

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43357

```

Thr Pro Met Arg Gly Ser Phe Gly Pro Cys Gly Val Lys Asn Ser Leu
1           5           10           15
Leu Pro Arg Phe Trp Ser Ala Tyr Asp Ala Leu Ser Leu Thr Ser Glu
20           25           30
Ser Pro Thr Leu Leu Leu Lys Ala Leu Pro Leu Ala Gln His Leu His
35           40           45
Arg Ala Ile Leu Arg Thr Gly Thr Ser Leu Leu Ser Lys His Gln Ile
50           55           60
Arg His Leu Arg Ala Phe Arg Ile Ala Val Val Lys Asp Gly Pro Asp
65           70           75           80
Val Lys Leu Phe Thr Asn Pro Gly Ala Leu Thr Lys Leu Ala Leu Trp
85           90           95
Ile Ala Glu Ala Ile Arg Val Gln Tyr Arg Glu Arg Gly Asp Ser Val
100          105          110
Lys Ile Gly Lys Lys Arg Ala Ala Gly Thr Pro Leu Val Leu Ala Gly
115          120          125
Leu Asp Glu Asp Arg Gly Leu Tyr Val Val Val Gly Thr Gly Gly Gly
130          135          140
Gly Gly Val Ile Asp Tyr Ala Ala Met His Lys Arg Gln Glu Glu Arg
145          150          155          160
Arg Lys Lys Asn Glu Ser Asn Asp Asn Asn Gln Ile
165          170

```

&lt;210&gt; 43358

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (19), (23), (54)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43358

```

Leu Asp Met Arg Gly Asn Lys His Leu Leu Arg Lys Arg Phe Gly Ile
1           5           10           15
Ala Phe Xaa Glu Val Val Xaa Glu Asn Asn Thr Arg Val Arg Ile Asp
20           25           30
Ser Phe Glu His Cys Val Leu Lys Ile Gln Lys Gly Glu Leu Gly Gly
35           40           45

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## 19566

Phe Leu Glu Ala Leu Xaa Phe Arg Thr Val Leu Arg Leu Lys Ser Glu  
 50 55 60  
 Ser Pro Cys Arg Leu Pro Cys Ser Lys  
 65 70

<210> 43359  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 43359  
 Leu Thr Ala Thr Cys Ser Val Ile Ile Ala Thr Ile Ile Glu Ile Ala  
 1 5 10 15  
 Phe Ser Arg Asp Val Arg His Ser Thr Asp Pro Thr Tyr Asp Tyr Cys  
 20 25 30  
 Pro Ile Thr Ile Ala Ser Gln Val Val Gln Cys Ala Ser Ile Val Thr  
 35 40 45  
 Ala Cys Trp Gly Gln Leu Lys Pro Phe Leu Asn Gln Leu Lys Ser Asn  
 50 55 60  
 Gly Leu Arg Ile Gln Gly Val Gln Tyr Gln Tyr Ser Thr Gly Lys Gly  
 65 70 75 80  
 Gln Ser Ser Arg Ser Tyr Gly Arg Ser Gly Thr Asn Gln Ser Ser Pro  
 85 90 95  
 Arg Gly Thr Lys Ile Arg Gly  
 100

<210> 43360  
 <211> 181  
 <212> PRT  
 <213> A.fumigatus

<400> 43360  
 Asn Arg Phe Tyr Leu Val Val Ser Gly Asp Ser Cys Tyr Asp Ile Ala  
 1 5 10 15  
 Ala Ala Gln Gly Ile Ser Leu Asp Asn Phe Tyr Thr Trp Asn Pro Ala  
 20 25 30  
 Val Gly Ser Ser Cys Gly Gly Leu Trp Pro Asp Tyr Tyr Val Cys Val  
 35 40 45  
 Gly Val Ile Ser Asp Gly Thr Thr Thr Thr Thr Thr Thr Thr Pro  
 50 55 60  
 Ser Thr Thr Ser Thr Thr Thr Thr Thr Ala Gly Asn Gly Val Ile Thr  
 65 70 75 80  
 Pro Thr Pro Ile Gln Thr Gly Met Val Thr Asn Cys Asn Lys Phe Tyr  
 85 90 95  
 Gln Val Val Ser Gly Asp Gly Cys Tyr Asp Ile Ala Ala Ala Gly  
 100 105 110  
 Ile Ala Leu Asn Asp Phe Tyr Thr Trp Asn Pro Ala Val Gly Asn Thr  
 115 120 125  
 Cys Ala Gly Leu Trp Pro Asp Tyr Tyr Val Cys Val Gly Ile Ile Gly  
 130 135 140  
 Ser Ser Gly Thr Thr Thr Thr Lys Thr Thr Ser Thr Thr Ser Gly  
 145 150 155 160  
 Asn Gly Val Ala Thr Pro Thr Pro Ser Phe Leu His Gly Ser Gln Arg  
 165 170 175  
 Pro Arg Lys Glu Gly  
 180

<210> 43361  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 43361  
 Cys Pro Ser Pro Leu Ser Ala Ala Ala Ala Thr His Ile Ile His Gln  
 1 5 10 15  
 Thr Glu Ser Glu Ala Gly Ser Leu Arg Gln Ser Gly Ser Thr Pro Lys  
 20 25 30  
 Gln Pro Lys Ser Thr Leu Ile Gln Leu Leu Phe Ser Gly Asp Ser Asn  
 35 40 45  
 Glu Ile Gln Glu Gln Gly Val Val Pro Ile Leu Gly Tyr Pro Ala Tyr  
 50 55 60  
 Val  
 65

<210> 43362  
 <211> 251  
 <212> PRT  
 <213> A.fumigatus

<400> 43362  
 Cys Leu Thr Ala Gly Arg Ala Asp Asn Lys Val Gln Lys Leu Val Asp  
 1 5 10 15  
 Ala Asp Gly Ser Glu Leu Pro Leu Phe Ile His Phe Glu His Ile Pro  
 20 25 30  
 Ser Ser Phe Val Gln Leu Ser Leu Leu Ile Ser Ala Gln Ser Val Pro  
 35 40 45  
 Val His Leu Arg Pro Phe Leu Ser Val Tyr Thr Glu Ala Phe Phe Asn  
 50 55 60  
 Leu Pro Val Gln Arg Asp Gly Lys Thr Ile Asn Phe Glu Gln Val Val  
 65 70 75 80  
 Val Glu Leu Glu Arg Asp Thr Val Gly Tyr Ser Met Glu Gly Ala Arg  
 85 90 95  
 Ser Leu Gly Asn Ser Glu Met Leu Arg Ile Ser Phe Gln Val Glu Ile  
 100 105 110  
 Glu Lys Tyr Ser Asn Ala Ile Ala Trp Leu Lys Glu Leu Ser Trp Asn  
 115 120 125  
 Ser Val Phe Asp Val Glu Arg Leu Arg Ala Ile Thr Ser Arg Leu Leu  
 130 135 140  
 Ala Asp Val Pro Asp Ala Lys Arg Ser Gly Asp Asp Met Leu Ala Ala  
 145 150 155 160  
 Val His Val Met Val His Tyr Ala Pro Glu Ser Ile Val Arg Ala Arg  
 165 170 175  
 Ser Thr Leu Val Lys Ala Arg Tyr Leu Lys Arg Ile Lys Arg Gln Leu  
 180 185 190  
 Ala Glu Gln Pro Lys Thr Val Val Ala Arg Met Glu Glu Ile Arg Gln  
 195 200 205  
 Ala Leu Phe Arg Phe Glu Asn Met Arg Val Leu Val Ile Ala Asp Ile  
 210 215 220  
 Asp Lys Leu Pro Asn Pro Val Ser Ser Trp Lys Pro Tyr Ala Glu Arg  
 225 230 235 240  
 Val Leu Thr Arg Arg Trp Pro Ile Ser Val Asn  
 245 250

<210> 43363  
 <211> 323  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (236), (237), (245), (246), (249)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43363  
 Arg Val Ser Val Lys Ile Arg Ile Leu Glu Thr Pro Glu Lys Thr Glu  
 1 5 10 15  
 Ser Leu Val Lys Arg Leu Val Ala Thr Gly Ile Thr Gly Leu Thr Val  
 20 25 30  
 His Cys Arg Thr Thr Pro Met Arg Pro Arg Glu Arg Ala Ile Arg Asp  
 35 40 45  
 Gln Leu Ala Met Ile Ala Arg Ile Cys Arg Glu Ala Gly Val Ala Cys  
 50 55 60  
 Val Met Asn Gly Asp Val Thr Ser Arg Asp Glu Ala Leu Ala Leu Met  
 65 70 75 80  
 Lys Glu Phe Gly Val Asp Gly Ala Met Ile Ala Thr Ala Ala Glu Ala  
 85 90 95  
 Asn Pro Ser Cys Phe Arg Ser Glu Ala Glu Gly Gly Leu Leu Pro Trp  
 100 105 110  
 Arg Glu Val Val His Asp Tyr Leu Gln Ala Ala Ile Glu Cys Glu Asn  
 115 120 125  
 Arg Phe Gly Asn Thr Lys Phe Leu Leu Asn Ile Leu Ile Pro Gly Lys  
 130 135 140  
 Asn Arg Glu Phe Lys Asp Ala Lys Thr Ala Lys Ser Tyr Ser Asp Tyr  
 145 150 155 160  
 Cys His Phe Leu Lys Phe Asp Asp Leu Leu Pro Gly Ala Ala Gln Leu  
 165 170 175  
 Asp Lys Ile Leu Ile Leu Thr Asp Asn Ser Val Tyr Lys Asn Asn Lys  
 180 185 190  
 Pro Glu Asp Pro Ala Arg Asn Ile Ala Phe Lys Thr Pro Pro Lys Ile  
 195 200 205  
 Thr Lys Thr Val Leu Ala Ala Thr Gly Pro Pro Arg Pro Lys Pro Ala  
 210 215 220  
 Pro Gln Pro Gly Thr Gly Glu Gly Pro Phe Pro Xaa Xaa Pro Ser Pro  
 225 230 235 240  
 Thr Pro Ala Ser Xaa Xaa Pro Arg Xaa Leu Pro Ile Glu Leu Pro Gly  
 245 250 255  
 Ser Ser Ser Gln Arg Leu Leu Pro Lys Pro Glu Leu Gly Arg Leu Asn  
 260 265 270  
 Phe Thr Phe Ser Ser Pro Pro Asn Pro Val Pro Gly Asp Phe Asn Phe  
 275 280 285  
 Ile Pro Leu Ser Pro Ile Phe Pro Asn Leu Leu Gly Leu Pro Glu Phe  
 290 295 300  
 Gln Ile Arg Leu Phe Trp Leu Phe Val Trp Lys Lys Pro Pro Arg Gly  
 305 310 315 320  
 Ser Leu Val

<210> 43364



## 19569

<211> 246  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (12), (13), (14), (33), (57), (58)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43364  
 Phe Ile Leu Val Phe Ser Tyr Leu Leu Phe Pro Xaa Xaa Xaa Leu Phe  
 1 5 10 15  
 Leu Cys Met Phe Phe Phe Leu Ser Phe Phe Phe Leu Phe Phe Ser Ala  
 20 25 30  
 Xaa Leu Leu Ser Phe Ser Ser Phe His Trp Val Arg Cys Val Ser Phe  
 35 40 45  
 Tyr Ser Arg Thr Gly Gly Ala Ala Xaa Xaa Gln Ala Gly Ala Pro Ser  
 50 55 60  
 Pro Ile Ala Val Val Gly Met Gly Met Arg Leu Pro Gly Ala Val Arg  
 65 70 75 80  
 Thr Ala Asp Asp Phe Trp Asp Ala Leu Ile Ser Gln Lys Asp Cys Ser  
 85 90 95  
 Ser Glu Val Pro Gln Thr Arg Tyr Asn Ile Asp Ala Phe Tyr His Pro  
 100 105 110  
 Asp Lys Pro Gln Ser Val Arg Thr Arg Arg Gly Tyr Phe Leu Glu Asp  
 115 120 125  
 Asp Tyr Leu Gln Lys Ala Asp Thr Asn Phe Leu Gln Trp Ile Pro Gly  
 130 135 140  
 Phe Ser Thr Ser Glu Leu Asp Pro Gln Gln Arg Leu Leu Leu Glu Val  
 145 150 155 160  
 Ile Trp Glu Cys Met Glu Asn Ala Gly Gln Thr Gly Trp Arg Gly Lys  
 165 170 175  
 Asp Ile Gly Cys Tyr Val Gly Val Phe Gly Glu Asp Trp His Gln Leu  
 180 185 190  
 Thr Ala Lys Glu Ser Gln Met Ile Pro Arg Thr His Pro Phe Ala Asn  
 195 200 205  
 Gly Trp Phe Ala Leu Ser Asn Arg Val Ser Phe Glu Phe Asp Leu Lys  
 210 215 220  
 Gly Pro Lys Leu Met Gly Ser Ser His Pro Pro Trp Lys Ile Ser Leu  
 225 230 235 240  
 Leu Gly Gln Tyr Leu Arg  
 245

<210> 43365  
 <211> 187  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (58)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43365  
 Leu Phe Pro Tyr His Asp Thr Gly Asn Val Thr Leu Asp Ala Phe Asn  
 1 5 10 15

## 19570

Val Ser Gln Arg Val Gly Thr Asp Leu Gln Phe Arg Cys Ile Asp Gln  
 20 25 30  
 Ala Thr Val Phe Ala Gly Val Thr Ser Gly Val Phe Gln Pro Ser Tyr  
 35 40 45  
 Phe Tyr Gln Ile Gln Arg Thr Thr Gly Xaa Tyr Asp Pro Asn Asn Leu  
 50 55 60  
 Gly Gly Pro Pro Ala Thr Pro Glu Phe Pro Asn Gly Asp Pro Glu Leu  
 65 70 75 80  
 Pro Tyr Phe Arg Leu His Gly Ala Asp Leu Pro Trp Val Phe Gly Thr  
 85 90 95  
 Leu Thr Thr Leu Arg Glu Pro Leu Asp Leu Phe Ser Met Gln Leu Val  
 100 105 110  
 Ser Ala Tyr Phe Ala Glu Phe Val Arg Ser Gly Gln Pro Asn Pro Ala  
 115 120 125  
 Pro Glu Tyr Leu Gln Ala Arg Gly Tyr Lys Gln Thr Leu Asp Ala Val  
 130 135 140  
 Asn Asn Phe Asp Arg Trp Glu Pro Val Ser His Ser Glu Gly Pro Leu  
 145 150 155 160  
 Gln Leu Leu Asp Tyr Pro Ser Val Lys Asp Pro Leu Pro Gly Leu Leu  
 165 170 175  
 Pro Arg Gly Pro Ala Asp Pro Arg Tyr Ala Val  
 180 185

&lt;210&gt; 43366

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43366

Ser Lys Arg Arg Ser Val Pro Leu Phe His Glu Ser Ala Thr Phe Pro  
 1 5 10 15  
 Pro Phe Met Thr Tyr Pro Val Pro Asn Leu Gln Ile Asn Ile Trp Val  
 20 25 30  
 Leu Phe Phe Gln Pro Gly Gln Pro Ser Pro Glu Met Leu Trp Val Glu  
 35 40 45  
 Phe Leu Lys Gly Phe Gly Met Asn Leu Ile Ile Leu  
 50 55 60

&lt;210&gt; 43367

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43367

His Ser Leu Leu Ile Pro Ile Val Tyr Ile Phe Ser Ser Ser Asn Pro  
 1 5 10 15  
 Leu Pro Leu Leu Lys Phe Asn Asn Ile Cys Thr Met Lys Leu Thr Thr  
 20 25 30  
 Val Ser Ile Leu Ala Ala Val Ser Ala Leu Ala Val Pro Thr Asn  
 35 40 45  
 Ile Lys Arg Asp Ser Tyr Ile Gln Ile Ser Asp Phe Trp Ala Arg Ala  
 50 55 60  
 Gly Pro Thr Ser Pro Gly Ala Ser Met His Phe Val Val Thr Asp Pro  
 65 70 75 80  
 Asn Tyr Pro Glu Asp Thr Pro Thr Asp Cys Asn Leu Ile Trp  
 85 90

19571

<210> 43368  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 43368  
 Pro Thr Leu Leu Leu Leu Ser Arg Thr Tyr Gly His Ala Pro Lys Glu  
 1 5 10 15  
 Gly Ala Arg Cys Asn Asn Gly Glu Tyr Tyr Ile Lys Phe Pro Asn Gly  
 20 25 30  
 Ala Pro Asp Phe Asn Leu Phe Thr Leu Glu Leu Gln Arg Val Ser Gly  
 35 40 45  
 Pro Ile Ala Glu Asp Gly His Val Leu Leu Ser Ser Asn Ala Asn Gly  
 50 55 60  
 Gly Ala Pro Gly Thr Lys Trp Ile Cys Val Asn Asp Pro Lys Pro Gly  
 65 70 75 80  
 Val Glu Ile Ser Cys Ser Tyr Asp Gly Val Leu Gln Met Gln Val Ala  
 85 90 95

<210> 43369  
 <211> 182  
 <212> PRT  
 <213> A.fumigatus

<400> 43369  
 Ser Pro Leu Ser Ala Ala Phe Ser Pro Pro Val Gly Glu Asn Arg Gly  
 1 5 10 15  
 Lys Glu Ser Phe Ala Ser Cys Leu Leu Asn Asn Ser His Met Ser Leu  
 20 25 30  
 Ser Asp Leu Asp Arg His Val Ile Arg Thr Tyr Arg Asp Ala Cys Arg  
 35 40 45  
 Arg Leu Asp Thr Gly Glu Ser Gln Thr Arg Glu Asn His Met Gln Ala  
 50 55 60  
 Val Arg Glu Tyr Glu Gln Ser Leu Gln Thr Asn Gly Pro Val Asn Leu  
 65 70 75 80  
 Tyr Phe Asp Leu Ala Thr Arg Thr Lys Met Gly Glu Glu Leu Asp Asn  
 85 90 95  
 Leu His Asp Met Trp Ser Tyr Val Arg Tyr Glu Lys Tyr Leu Pro Ala  
 100 105 110  
 Thr Val Asn Glu Asp Ala Glu His His Pro Ser Ser Lys Val Ser Asp  
 115 120 125  
 Pro Trp His Lys Ala Phe Trp Lys Pro Leu Tyr Gly Arg Leu Glu Ala  
 130 135 140  
 Glu Ala Gly Ala Trp Ala Gln Val Leu Ser Gly Lys Asn His Leu Tyr  
 145 150 155 160  
 Asp Cys Pro Thr Tyr Leu Leu Ala Ala Pro Leu Cys Glu His Gln Thr  
 165 170 175  
 Arg Asp Trp Gly Glu Thr  
 180

<210> 43370  
 <211> 151  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43370

```

Ser Ser Phe Gly Trp Gln Ser Asp Gly Leu Arg Gly His Ile Tyr Ala
1          5          10          15
Asp Lys Thr Asn Ser Thr Ile Val Ile Ser Leu Lys Gly Thr Ser Pro
          20          25          30
Ala Leu Phe Asp Gly Ala Gly Thr Thr Thr Asn Asp Lys Ile Asn Asp
          35          40          45
Asn Leu Phe Phe Ser Cys Cys Cys Gly Gln Gly Gly Ser Tyr Leu Trp
          50          55          60
Arg Gln Val Cys Asp Cys Gln Gln Ser Ala Phe Thr Ala Asn Leu Thr
65          70          75          80
Cys Ile Val Glu Ala Met Asn Asp Glu Asn Arg Tyr Tyr Arg Ala Ala
          85          90          95
Ile Asp Leu Tyr Ser Asn Val Thr Asp Met Tyr Pro Asp Ala Asn Val
          100          105          110
Trp Leu Thr Gly His Ser Leu Gly Gly Ala Met Ser Ser Leu Leu Gly
          115          120          125
Leu Thr Phe Gly Leu Pro Val Thr Phe Glu Ala Val Pro Glu Ala
          130          135          140
Leu Pro Ala Ala Arg Leu Val
145          150

```

&lt;210&gt; 43371

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (151)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43371

```

Asp Gln Ala Met Lys Asp Ala Gly Pro Leu Lys Pro Pro Val Val Asp
1          5          10          15
Glu Arg Lys Pro Leu Thr Gln Asp Glu Ile Ala Leu Gln Ala Leu Ile
          20          25          30
Arg Glu Ser Lys Gly Glu Thr Glu Gly Arg Thr Asp Leu Val Ile Glu
          35          40          45
Ser Ala Lys Arg Glu Val Asp Glu Gly Tyr Pro Val Arg Leu Asp Glu
          50          55          60
Thr Gly Ser Phe Arg Val Asp Val Ala Ser Arg Pro Glu Pro Ala Thr
65          70          75          80
Leu Asp Gln Tyr Asn Ala Ile Pro Val Glu Glu Phe Gly Ala Ala Leu
          85          90          95
Leu Arg Gly Met Gly Trp Lys Glu Gly Gln Ser Ile Gly Arg Gly Lys
          100          105          110
Tyr Gly Thr Ser Ala Thr Asp Tyr Thr Ser Gln Thr Pro Arg Ile Pro
          115          120          125
Glu Arg Arg Pro Gly Phe Leu Gly Ile Gly Ala Lys Asp Val Ser Gly
          130          135          140
Gly Asn Gly Ala Lys Ala Xaa Leu Gly Ala Trp Gly Arg Ala Ala Met
145          150          155          160
Arg Lys Gly Ala Arg Lys Ala Lys Asn Pro Gly Gly
          165          170

```

## 19573

<210> 43372  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 43372  
 Pro Thr Pro Cys Pro Thr Pro Ala Asp Tyr Gly Asn Tyr Gly Asp Tyr  
 1 5 10 15  
 Gly Lys Tyr Gly Lys Tyr Gly Asp Tyr Gly Gln Tyr Lys Val Lys Arg  
 20 25 30  
 Asp Asp Glu Pro Cys Thr Thr Thr Thr Glu Thr Pro Thr Pro Ser Pro  
 35 40 45  
 Thr Pro Ala Asp Tyr Gly Asp Tyr Gly Asn Tyr Gly Asn Tyr Gly Asn  
 50 55 60  
 Tyr Gly Thr Tyr Glu Asn Tyr  
 65 70

<210> 43373  
 <211> 193  
 <212> PRT  
 <213> A.fumigatus

<400> 43373  
 Phe Glu Ala Arg Val Arg Pro Ala Pro Trp Ala Glu Asp Asp Ala Ala  
 1 5 10 15  
 Val Ile Ala Cys Arg Gly Gly Met Tyr Thr Ile Leu Ala Thr Ala His  
 20 25 30  
 Asp Tyr Glu Leu Gly Gly Ala Ser Leu Asp Gln Ile Val Ile Asp His  
 35 40 45  
 Phe Ala Lys Glu Phe Ile Lys Lys His Lys Thr Asp Pro Arg Glu Asn  
 50 55 60  
 Ala Arg Gly Leu Ala Lys Leu Lys Leu Glu Gly Glu Ala Thr Arg Arg  
 65 70 75 80  
 Ala Leu Ser Leu Gly Thr Asn Ala Ser Leu Ser Ile Glu Ser Leu Ala  
 85 90 95  
 Asp Gly Ile Asp Phe Ser Ser Thr Ile Asn Arg Thr Arg Tyr Glu Leu  
 100 105 110  
 Leu Ser Gly Lys Val Phe Ala Gln Phe Thr Arg Leu Ile Glu Gln Val  
 115 120 125  
 Val Gln Lys Ala Glu Leu Asp Val Leu Asp Ile Asp Glu Val Ile Phe  
 130 135 140  
 Ser Gly Gly Thr Ser His Thr Pro Lys Ile Ala Gln Leu Ala Arg Asn  
 145 150 155 160  
 Met Phe Ser Glu Lys Thr Lys Ile Leu Ala Pro Ser Thr Ser Ala Ser  
 165 170 175  
 Ala Ile Asn Pro Ser Glu Leu Ala Pro Arg Gly Ala Ala Ile Gln Ala  
 180 185 190  
 Ser

<210> 43374  
 <211> 183  
 <212> PRT  
 <213> A.fumigatus

<400> 43374

19574

```

Leu Arg Tyr Gly Asn Trp Phe Lys Thr Val His Lys Phe Lys Pro Arg
1          5          10          15
Glu Ile Val Ala Val Asp Phe Met Asn Ser Ser Thr Val Ile Phe Phe
          20          25          30
Leu Leu Gly Leu Trp Ser Ile Gly Ala Val Pro Ala Phe Ile Asn Tyr
          35          40          45
Asn Leu Thr Gly Lys Pro Leu Thr His Ser Val Arg Thr Ser Thr Ala
          50          55          60
Arg Leu Leu Ile Val Asp Asp Glu Val Arg Asp Cys Phe Pro Pro Glu
65          70          75          80
Gln Leu Glu Ile Phe Ala Ser Ser Asp Phe Arg Glu Asp Lys Gly Ala
          85          90          95
Val Glu Val Val Phe Phe Thr Pro Asp Val Glu Ala Gln Val Met Gln
          100          105          110
Thr Glu Pro Val Arg Glu Asp Asp Lys Ala Arg Ser Gly Pro Val Leu
          115          120          125
Arg Asp Met Ala Met Leu Ile Tyr Thr Ser Gly Thr Thr Gly Leu Pro
          130          135          140
Lys Pro Ala Ile Val Ser Trp Arg Lys Cys Trp Thr Gly Ser Thr Phe
145          150          155          160
Val Ser Asn Trp Leu Gly Leu Lys Pro Ala Asp Arg Phe Ser Pro Gly
          165          170          175
His Ala Gly Met Lys Glu Trp
          180

```

<210> 43375

<211> 156

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (61), (138)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43375

```

His Gly Arg Arg Leu His Ser Ala Ile Arg Tyr Gly Ile Thr Gln Ala
1          5          10          15
Leu Phe Ala Ala Thr Ala Leu Ala Gln Arg Arg Thr Ile Ala Glu Val
          20          25          30
Ile Cys His Glu Trp Ser Leu Gly Ser Ile Ala Asp Arg Pro Val Asp
          35          40          45
Ile Leu Ala Ser Cys His Arg Asn Asp Ala Leu Gln Xaa Asp Arg Met
          50          55          60
Ile Met Lys Lys Ala Pro Met Leu Pro His Ala Ser Phe Val His Ala
65          70          75          80
Ser Asp Ile Gly Pro His Gly Met Val Leu Met Asp Tyr Val Asp Thr
          85          90          95
Val Ala Arg Arg Ile Arg Gln Arg Ala Pro Pro Gly Tyr His Pro Arg
          100          105          110
Leu His Phe Asp Val Tyr Gly Thr Leu Gly Asp Val Phe Pro Glu Thr
          115          120          125
Thr Arg Leu Ala Asp Phe Leu Gly Arg Xaa Arg Gln Arg Ala Arg Pro
          130          135          140
Tyr Ala Leu Leu Ile Glu Ser Pro Ile Ile Ala Pro
145          150          155

```

<210> 43376  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (81), (82)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43376  
 Lys Pro Ala Gln Ile Gln Arg Leu Ala Ala Leu Arg Ala Cys Leu Lys  
 1 5 10 15  
 Arg Lys Ser Ile Asp Val Arg Ile Val Ala Asp Glu Trp Cys Asn Thr  
 20 25 30  
 Leu Pro Asp Ile Arg Asp Phe Ala Asp Ala Val Asp Tyr Val  
 35 40 45  
 Gln Ile Lys Met Pro Asp Leu Gly Gly Val Asp Gln Ser Ile Asp Ala  
 50 55 60  
 Val Leu Tyr Trp Ser Ser Pro Arg Arg Leu Ala Gly Ser Ala His Thr  
 65 70 75 80  
 Xaa Xaa Pro Gln

<210> 43377  
 <211> 149  
 <212> PRT  
 <213> A.fumigatus

<400> 43377  
 Leu Ile Ala Ser Leu Tyr Arg His Cys Phe Arg Arg Ala Ala Ser Arg  
 1 5 10 15  
 Leu Leu Ser Leu Pro Val Thr Ala Pro Thr Trp Ser Ala Arg Ala Leu  
 20 25 30  
 Ala Pro Arg Val Pro Leu Pro Val Leu Ser Pro Leu Gln Ser Gln Leu  
 35 40 45  
 Ala Leu His Thr Arg Trp Phe Ser Asp Asn Thr Ala Ser Gln Glu Pro  
 50 55 60  
 Thr Ser Ser Pro Glu His Glu His His Gly His Ser Glu Thr Val Leu  
 65 70 75 80  
 Ala Glu Pro Asp Thr Arg Asp Ala Arg Pro Gln Lys Pro Lys Met Arg  
 85 90 95  
 Leu Arg Val Leu Glu Glu Asn Leu Arg Pro Arg Gln Thr Val Tyr Val  
 100 105 110  
 Gly Asn Leu Phe Tyr Asp Val Thr Ala Glu Asp Leu Lys Asn His Met  
 115 120 125  
 Gln Gln Phe Gly Val Val Glu Arg Val Asp Leu Ile Thr Asp Asn Arg  
 130 135 140  
 Gly Leu Ser Arg Arg  
 145

<210> 43378  
 <211> 83  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43378

Gly Cys Cys Asp Lys Leu Phe Ser Thr Arg Ala Thr Val Thr Asp Cys  
 1 5 10 15  
 Ile Ser Leu Gln Ala Leu Leu Ser Ala Ser Ser Gln Ser Pro Leu Val  
 20 25 30  
 Phe Ala Gly His Arg Ala Asp Met Val Cys Gln Gly Pro Cys Thr Ser  
 35 40 45  
 Arg Pro Thr Thr Arg Ile Ile Pro Ser Ala Ile Ser Ile Ser Phe Thr  
 50 55 60  
 Tyr Glu Met Val Gln Arg Gln His Arg Gln Pro Gly Ala Asp Glu Leu  
 65 70 75 80  
 Thr Arg Ala

&lt;210&gt; 43379

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43379

Gly His Leu Thr Asp Thr Val Met Val Glu Lys Lys Phe Val Pro Ile  
 1 5 10 15  
 Thr Leu Phe Pro Lys Lys Ala Arg Arg Phe Thr His Ser Gly Leu Val  
 20 25 30  
 Ala Phe Phe Leu Phe Ile Tyr Phe Cys Ile Thr Lys Thr Ser His His  
 35 40 45  
 Val Gly Glu Pro Gly Ser Tyr Ser Thr Pro Val Lys Ala Lys Val Gly  
 50 55 60  
 Glu Thr Phe Pro Arg Lys Ile Trp Gln Ile Trp Lys Val Asn Pro Leu  
 65 70 75 80  
 Glu Phe Asp Ala Arg Asp Ile Asp Val Ala Arg Ser Trp Thr Ala Lys  
 85 90 95  
 Asn Pro Gly Tyr Arg Tyr Glu Ile Leu Thr Asp Gln Asn Asp Leu Glu  
 100 105 110  
 Tyr Val Glu Ala Asn Phe Gly Pro Leu Gly Glu Asn Arg Pro His Ile  
 115 120 125  
 Val Glu Thr Tyr Arg Ser Leu Asn Ala  
 130 135

&lt;210&gt; 43380

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43380

Asn Leu Arg Gln Ala His Leu Arg Ser Val Arg Pro Trp Glu Thr Met  
 1 5 10 15  
 Pro Lys Ser Ser Met Pro Pro Leu Ser Gly Thr Ile Pro Asn Tyr Val  
 20 25 30  
 Leu Met Gly Val Gly Ala Trp Ser Ala Gly Tyr His Met Thr Leu Lys  
 35 40 45  
 Tyr His Thr Gln Met Cys Met His Pro Cys Leu Ser Ser Leu Pro Pro  
 50 55 60  
 Trp Leu Ser Leu Pro Arg Ile Leu Ser Val Phe Gln Arg Met Asn Tyr  
 65 70 75 80



## 19577

Gln Cys Ile Tyr Leu Ser Arg Phe Phe Cys Thr Gly Ser Ser Leu Ser  
                   85                  90                  95  
 Arg Leu Ala Phe Ser Ala Pro Gly Ser  
                   100                  105

<210> 43381  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<400> 43381  
 Ser Glu Val Ser Asp Phe Ser Thr Ser Glu Asp Ser Phe Thr Asp Glu  
 1                  5                  10                  15  
 Asp Gly Asp Asp Glu Asp Gly Gly Ala Pro Val Pro Asp Met Pro Ala  
                   20                  25                  30  
 Pro Thr Ser Glu Arg Gly Val Ala Leu Ser Phe Pro Tyr Leu Glu Leu  
                   35                  40                  45  
 Tyr Gly Ile Glu Leu Leu Glu Leu Val Gly Leu Tyr Ile Thr Val Lys  
                   50                  55                  60  
 Cys Asp Arg Cys Lys Glu His Leu Asp Val Arg Asn Ile Pro Gln Val  
 65                  70                  75                  80  
 Lys Asp Lys Ser Asp Ala Leu Ala Pro Lys Val Glu Thr Cys Lys Lys  
                   85                  90                  95  
 Cys Thr Asn Thr Met Ser Leu Gly Lys Asn Ile Leu Phe His Ser Leu  
                   100                  105                  110  
 Lys Gly Gly Lys Asn Pro Lys Thr Pro Lys Asn Ser His  
                   115                  120                  125

<210> 43382  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 43382  
 Pro Ala Ile Asp Ala Leu Ser Ala Ser Pro Ala Val Lys Lys Tyr Pro  
 1                  5                  10                  15  
 Ile Thr Gly Gln Thr Thr Phe Leu Ile His Ser Pro Trp Phe Glu Ser  
                   20                  25                  30  
 Leu Thr Ile Asp Leu Gly Gly Val Lys Gln Leu Arg Val Thr Ala Thr  
                   35                  40                  45  
 Gly Gly Asp Gly Asn Gly Asp Ser Lys Ile Tyr Val Gln Ser Leu Lys  
                   50                  55                  60  
 Val Asn Gly Asn Pro Trp Arg Lys Asn Trp Leu Thr Trp His Asp Val  
 65                  70                  75                  80  
 Phe Glu Asn Gly Gly Thr Leu Glu Phe Glu Leu Gly Glu Ser Pro Ser  
                   85                  90                  95  
 Gly Trp Phe Thr Gly Glu Leu Pro Pro Ser Pro Ala Ser  
                   100                  105

<210> 43383  
 <211> 276  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE

19578

<222> (30), (271)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43383

```

Pro Thr Leu Leu Ser Asp Arg Arg Leu Leu Ser Ser Ser Pro Ile Pro
1          5          10          15
Asn Pro His Thr His Phe Pro Ser Phe Gly Lys Trp Gln Xaa Pro Ser
          20          25          30
Asn Gln Pro Thr Pro Ile Leu Met Asn Gly Ile Asn Met Ser Gly Met
          35          40          45
Leu Gln Thr Pro Ala Arg Pro Arg Pro Pro Gly Thr Met Val Pro Leu
          50          55          60
Phe Arg Pro Val Glu Lys Ala Thr Asp Ala Ala Glu Leu Thr Asp Val
65          70          75          80
Leu Ala Ser Ser Gly Ile Asp Val Arg Glu Glu Glu Ala Phe Leu Thr
          85          90          95
Ser Ser Tyr Ser Ala Pro Gly Val Gln Ala Gln Gln Ser Leu Arg Val
          100          105          110
Gln Gln Pro Pro Ser Ser Gln Gln Pro Gln Gln Ala Leu Asn Thr
          115          120          125
Ser Phe Ala Ser Gln Ala Phe Thr Thr Gly Thr Ile Ser Thr Thr Pro
          130          135          140
Ser Phe Ser Glu Pro Ser Gln Phe Lys Pro Gln Val Thr Gln Asp Ser
145          150          155          160
Phe Tyr Thr Glu Pro Ala Ser Gln Pro Pro Ala Pro Phe Lys Asp Pro
          165          170          175
Asn Glu Pro Thr Arg Glu Asp Thr Glu Ala Ala Arg Arg Ala Gln Tyr
          180          185          190
His Leu Gln Glu Pro Phe Leu Leu Thr Lys Val Leu Glu Gln Arg Leu
          195          200          205
Gln Arg Arg Gly Phe Glu Leu Gly Val Arg Ile Pro Ala Glu Gly Leu
          210          215          220
Phe His Pro Val Pro Gly Arg Pro Gln Pro Ile Glu Val Thr Gly Pro
225          230          235          240
Asp Gly Ser Ser Ile Val Arg Thr Gly Lys Thr Ile Leu Asn Gln Glu
          245          250          255
Gly Ala Pro Leu Val Asp Ile Leu Asn Leu Leu Ser Ile Ala Xaa Val
          260          265          270
Ile Thr Pro Gly
          275

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<210> 43384

<211> 65

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (30)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43384

```

Ser His Leu Val Lys Arg Gln Ala Pro Phe Ile Ile Phe Ala Asn Pro
1          5          10          15
Gln Ser Pro Tyr Ala Phe Pro Gln Phe Trp Glu Val Ala Xaa Thr Val
          20          25          30

```

## 19579

Lys Ser Thr Asn Pro Asn Ser Tyr Glu Trp Asp Gln His Glu Trp Asp  
 35 40 45  
 Ala Ser Asn Thr Gly Pro Ala Thr Ala Pro Arg His Asp Gly Ser Thr  
 50 55 60  
 Phe  
 65

<210> 43385  
 <211> 236  
 <212> PRT  
 <213> A.fumigatus

<400> 43385  
 His Thr Lys Val Cys Asp Arg Arg Val Cys Pro Ser Arg Leu Arg Leu  
 1 5 10 15  
 Asn Glu Thr Glu Asp Tyr Ser Gly Gly Ala Gly Gly Thr Gly Gln  
 20 25 30  
 Ser Glu Ala Asn Tyr Val Asp Pro Leu Ala Asp Gly Ser Lys Cys Glu  
 35 40 45  
 Arg Asp Ile Pro Tyr Leu Leu Gln Leu Arg Thr Asn Val Ile Arg Thr  
 50 55 60  
 Tyr Ala Val Asn Pro Ser Leu Asn His Asp Ala Cys Met Gln Lys Leu  
 65 70 75 80  
 Ser Asp Ala Gly Ile Tyr Val Ile Thr Asp Leu Ala Ser Pro Asp Glu  
 85 90 95  
 Ser Ile Thr Ser Asn Ser Pro Val Trp Thr Val Asp Gln Tyr Ala Arg  
 100 105 110  
 Tyr Thr Ser Val Ile Asp Ala Phe Gln Lys Tyr Asp Asn Val Ile Gly  
 115 120 125  
 Phe Phe Ala Gly Asn Glu Val Val Asn Gln Ala Asn Gln Ser Ala Gly  
 130 135 140  
 Ala Ala Phe Val Lys Ala Ala Ala Arg Asp Met Asn Ala Tyr Ile Lys  
 145 150 155 160  
 Thr Asn Gly Tyr Arg Gln Ser Leu Ala Ile Gly Tyr Ala Thr Thr Asp  
 165 170 175  
 Asn Pro Glu Ile Arg Leu Ser Leu Ser Asp Tyr Leu Asn Cys Gly Glu  
 180 185 190  
 Gln Ala Asp Ala Val Asp Phe Phe Gly Tyr Asn Ile Tyr Gln Trp Cys  
 195 200 205  
 Arg Asp Lys Thr Phe Gln Thr Ser Gly Tyr His Asn Arg Thr Glu Asp  
 210 215 220  
 Tyr Asn Asp Tyr Ser Ile Pro Ile Phe Phe Ser Glu  
 225 230 235

<210> 43386  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 43386  
 Asn Arg Arg Glu Asp Ala Thr Leu Glu Pro Glu Glu Leu Asp Phe Asn  
 1 5 10 15  
 Arg Ser Asn Leu Ile Leu Glu Phe Arg Glu Thr Leu Lys Phe Gly Val  
 20 25 30  
 Ile Ser Ser Gln Lys Arg Ala Glu Gln Arg Phe Ile Gln Cys Ile Val  
 35 40 45

## 19580

Ser Arg Gly Asn Ser Ser Ala Trp Ile Tyr Ile Tyr His Asp Asp Lys  
 50 55 60  
 Ser Glu Ser Cys Ile Pro Leu  
 65 70

<210> 43387  
 <211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 43387  
 Gly Thr Leu Ala Val Arg Pro Pro Cys Ala Val His Gln Gln Phe Gly  
 1 5 10 15  
 Glu Ala Leu Ser Ser Ile Met Gly Pro Ser Ala Gly Glu Asn Ala His  
 20 25 30  
 Glu Thr Asp Gln Asp Ser Arg Tyr Cys Ser Leu Ile Asp Phe Asp Ala  
 35 40 45  
 Asp Asp Pro Asp Leu Pro Leu Asn Trp Ser Phe Ser Arg Lys Ile Trp  
 50 55 60  
 Val Thr Ser Met Val Ala Ile Leu Asn Leu Ile Gly Thr Ile Ala Ser  
 65 70 75 80  
 Ser Ile Phe Gly Thr Gly Ile Lys Asp Phe Met Gln Glu Phe Asn Val  
 85 90 95  
 Ser Asn Glu Ile Ala Val Gln Gly Thr Thr Leu Phe Leu Ala Val Arg  
 100 105 110

<210> 43388  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 43388  
 Lys Met Ala His Phe Leu Ala Ser Glu Leu Gly Ala Leu Gly Ala Glu  
 1 5 10 15  
 Val Glu Gln Arg Pro Leu Gly Lys Gln Pro Gly Lys Glu His Leu Asp  
 20 25 30  
 Leu Pro Pro Val Val Ile Ala Arg Tyr Gly Asn Asp Lys Asn Lys Arg  
 35 40 45  
 Thr Ile Leu Val Tyr Gly His Tyr Asp Val Gln Pro Ala Leu Lys Asp  
 50 55 60  
 Asp Gly Trp Ala Thr Glu Pro Phe Glu Leu Thr Ile Asp Asp Gln Gly  
 65 70 75 80  
 Arg Met Phe Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val Leu Gly  
 85 90 95  
 Trp Leu Asn Val Ile Glu Ala His Gln Lys Ala Gly Val Glu Leu Pro  
 100 105 110  
 Val Asn Leu Leu Cys Cys Phe Glu Gly Met Glu Glu Tyr Gly Ser Lys  
 115 120 125  
 Gly Leu Glu Glu Phe Ile Lys Ser Glu  
 130 135

<210> 43389  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

19581

<400> 43389

```

Ile His Asn Cys Tyr Ser Leu Phe Val Pro Leu Lys Phe Arg Thr Pro
1           5           10           15
Asp Phe Ile Thr Val Thr Gly Met Ser Asp Lys Lys Ser Gly Cys Arg
           20           25           30
Glu Leu Arg Asp Leu Leu Thr Pro Arg Asn Phe Val Ser Asn Pro Pro
           35           40           45
Ile Ser Phe Ala Ile Cys Asn Pro Arg Ala Ala Tyr Ala Arg Asn Val
           50           55           60
Pro
65

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<210> 43390

<211> 70

<212> PRT

<213> A.fumigatus

<400> 43390

```

Arg Leu Pro Val Val Cys Asn Gln Asp Glu Leu Val Val Phe Glu Ser
1           5           10           15
Pro Pro Asn Thr Thr Cys Gly Glu Tyr Ala Met Pro Trp Leu Ser Ser
           20           25           30
Thr Gly Ser Gly Tyr Leu Ser Asn Pro Asp Gly Ser Gly His Cys Gly
           35           40           45
Tyr Cys Lys Tyr Ser Arg Gly Asp Asp Val Ser Leu Ile Trp Leu Gly
           50           55           60
Met Ser Gln Arg Gly Cys
65           70

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<210> 43391

<211> 182

<212> PRT

<213> A.fumigatus

<400> 43391

```

Val Asp Asp Phe Ile Ser Gly Leu Trp Lys Val His Leu Ser Val Lys
1           5           10           15
Lys Glu Gly Tyr Val Gln Asn Leu Ser Leu Gly Leu Tyr Arg Ser Asp
           20           25           30
Tyr Met Ala His Ala Pro Thr Asn Ala Asn Thr Pro Ser Leu Lys Gln
           35           40           45
Val Glu Phe Asn Thr Ile Ser Ser Ser Phe Gly Gly Leu Ser Ser Leu
           50           55           60
Val Arg Lys Leu His Ser Glu Leu Leu Thr Ser Pro Pro Gly Tyr Pro
65           70           75           80
Ile Ser Tyr Pro Phe His Pro Leu Phe Glu Ser Asn Val Pro Pro Glu
           85           90           95
Asn Thr Ala Val Glu Thr Leu Ser Ala Gly Leu Ala Ala Ala His Ser
           100          105          110
Ala Tyr Gly Pro Ser Lys Ser Thr Pro Ala Leu Pro Thr Cys Ile Leu
           115          120          125
Phe Val Val Gln Glu Asn Glu Arg Asn Ile Phe Asp Gln Leu Ala Leu
           130          135          140
Ser Arg Gln Leu Thr Thr Val His Lys Ile Pro Val Phe Arg Leu His
145          150          155          160
Ser Thr Glu Val Leu Asp His Thr Ser Ile Pro Ala Ser Ser Ala His

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## 19582

Ala Gly Gln Arg Asn Gly  
180

170

175

&lt;210&gt; 43392

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43392

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Cys | Ile | Ala | Ser | Val | Val | Arg | Pro | Ala | Cys | Gly | Glu | Thr | Val | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Gly | Glu | Gly | Leu | Gln | Gln | Tyr | Lys | Ser | Leu | Arg | Asp | Leu | Glu | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Leu | Asp | Ala | Ser | Ile | Val | Arg | Lys | Arg | Leu | Asp | Ile | Gln | Asp | Ser |
|     |     | 35  |     |     |     |     |     | 40  |     |     |     | 45  |     |     |     |
| Ile | Ser | Lys | Thr | Val | Lys | Lys | Tyr | Arg | Thr | Met | Arg | Ile | Trp | Ile | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Thr | Val | Glu | Asn | Gln | Pro | Trp | Gln | Thr | Gly | Ala | Gly | Gln | Asn | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Ala | Pro | Gly | Ser | Asn | Pro | Gly | Ser | Gly | Arg | Tyr | Lys | Val | Arg | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Gly | Arg | Leu | Leu | Asp | Asp | Asp | Thr | Asp | Pro | Thr | Ala | Pro | Asp | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Glu | Asp | Glu | Gly | Glu | Asn | Ala | Glu | Glu | Asn | Gly | Asp | Thr | Met | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| His | Asp | Gly | Gln | Asp | Ala | Glu | Lys | Ala | Lys | Lys | Pro | Ala | Ala | Lys | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Lys | Gln | Arg | Phe | Ser | His | Phe | Phe | Lys | Ser | Ile | Thr | Ile | Asp | Phe |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asp | Lys | Ser | Pro | Ser | Asn | Pro | Glu | Glu | Thr | Lys | Thr | Ile | Ser | Trp |     |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Thr | Lys | Pro | Gln | Leu | Pro | Ala | Asn | Ala | Val | Thr | Leu | Pro | Pro | Ile | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

&lt;210&gt; 43393

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43393

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Thr | Leu | Arg | Ser | Val | Arg | Thr | Gln | Ser | Ala | Thr | Asn | Asp | Leu | Tyr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ile | Ala | Pro | Arg | Arg | Ser | Ile | Ile | Arg | His | Ser | Arg | Arg | Pro | Gln |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| His | Cys | Val | Asp | Lys | Asn | Leu | Gln | Gln | Ile | Arg | Ile | Pro | Leu | Arg | His |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Asn | Ile | Val | Trp | Ser | Ile | Leu | Pro | Asp | Asp | Ile | Asp | Gly | Pro | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Lys | Val | Asn | Thr | Arg | Val | Gly | Gly | Ala | Val | Glu | Trp | Phe | Phe | Ser |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Ser | Gln | Tyr | Gly | Leu | Arg | Thr |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 85  |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43394

&lt;211&gt; 180

19583

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (105), (133), (164), (172)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43394

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ala | Arg | Phe | Leu | Pro | Ala | Pro | Val | Gly | Glu | Asp | Gly | Lys | Glu | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Leu | Asp | Leu | Ala | Arg | Ala | Gln | Thr | Asp | Ser | Asn | Val | Gly | Asn | Gly |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Val | Leu | Ser | Leu | Thr | Arg | Ala | Val | Gly | Asp | His | Asp | Thr | Pro | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Gly | Val | Gly | Val | Leu | Gly | Gly | Leu | Asp | Gly | Leu | Gly | Glu | Gly | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Leu | Val | Asp | Leu | Glu | Gln | Glu | Gly | Val | Ala | Gly | Leu | Glu | Leu | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Leu | Leu | Asp | Thr | Pro | Arg | Val | Gly | Asn | Ser | Gln | Val | Ile | Thr | Asn |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Leu | Glu | Val | Arg | Gly | Leu | Val | Xaa | Val | Ser | Pro | Gly | Leu | Pro | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Leu | Asn | Glu | Gly | Val | Leu | Asn | Ala | Asp | Asn | Gly | Val | Leu | Gly | Ser |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Gly | Leu | Val | Xaa | Val | Gly | Lys | Leu | Leu | Val | Gly | Glu | Pro | Leu | Gly |
|     |     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Gly | Val | Ala | Leu | Gly | Val | Leu | Glu | Val | Lys | Val | Val | Leu | Leu | Asp | Val |
| 145 |     |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Leu | Val | Xaa | Leu | Ala | Gly | Gly | Asn | Val | His | Xaa | His | Leu | Asp | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala | Gly | Val | Thr |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43395

<211> 180

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (9), (17), (48), (76)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43395

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Asn | Thr | Gly | Lys | Ile | Lys | Met | Xaa | Met | Asp | Val | Ala | Ser | Ser | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Xaa | Tyr | Lys | Ala | Asp | Val | Lys | Lys | Tyr | Asp | Leu | Asp | Phe | Lys | Asn | Pro |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Ser | Asp | Pro | Ser | Lys | Trp | Leu | Thr | Tyr | Glu | Gln | Leu | Ala | Asp | Xaa |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Lys | Ser | Leu | Ala | Ala | Lys | Tyr | Pro | Ile | Val | Ser | Ile | Glu | Asp | Pro |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe | Val | Glu | Asp | Asp | Trp | Glu | Ala | Trp | Arg | Tyr | Xaa | His | Lys | Thr | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Phe | Gln | Ile | Val | Gly | Asp | Asp | Leu | Thr | Val | Thr | Asn | Pro | Gly | Arg |

## 19584

[illegible]

<210> 43396

<211> 153

&lt;212&gt; PRT

<213> A.fumigatus

<400> 43396

[illegible]

<210> 43397

<211> 245

&lt;212&gt; PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

<222> (49), (54), (114), (241)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43397

Ala Phe Gly Asn Phe Gly Arg Thr Glu Ser Leu Ser Leu Pro Glu Phe  
1 5 10 15  
Thr Arg Lys Glu Phe Glu Thr Gly Asp Val Asn Leu Gly Ser Ala Val  
20 25 30



## 19585

```

Ile Gln Ser Thr Ser Glu Ile Phe Ala Val Gly Arg Ile Ala Ser Asn
    35                      40                      45
Xaa Leu Glu Gly Lys Xaa Asn Pro Ala Ser Leu Val Phe Glu Thr Ser
    50                      55                      60
Arg Arg Thr Gly Ala Gly Leu Arg Val Pro Leu Asn Leu Asp Ser Ile
    65                      70                      75                      80
Gln Ser Ala Asn Phe Phe Ala Gly Gln Ile Val Ala Leu Arg Gly Ile
                      85                      90                      95
Asn Ala Ser Gly Asn Tyr Phe Ser Val Lys Glu Val Leu Pro Pro Pro
                      100                      105                      110
Leu Xaa Pro Arg Ala Ala Ser Ser Pro Val Ser Val Asp Thr Ile Asn
                      115                      120                      125
Gln Arg Leu Glu Gln Ala Gly Ser Pro Ser Pro Leu Asn Val Leu Ile
    130                      135                      140
Ala Ser Gly Pro Tyr Thr Ala Asp Asp Asn Leu Ala Phe Glu Pro Leu
    145                      150                      155                      160
His Glu Ile Cys Gln Lys Ala Ala Glu Thr Tyr Ala Asp Ser Leu Val
                      165                      170                      175
Leu Met Gly Pro Phe Leu Asp Ile Glu His Pro Leu Leu Ala Ser Gly
                      180                      185                      190
Asp Phe Asp Leu Pro Glu Met Glu Gly Phe Asp Pro Asp Thr Ala Thr
                      195                      200                      205
Leu Ala Thr Val Phe Arg His Phe Ile Thr Val Pro Leu Gln Lys Leu
    210                      215                      220
Val Ala Ala Val Pro Ser Ile Thr Ile Val Met Ile Pro Ser Val Arg
    225                      230                      235                      240
Xaa Gly Thr Pro Pro
                      245

```

<210> 43398  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43398
Gln Leu Val Leu Ile Phe Gly Pro Pro Ser Thr Tyr Pro Ser Pro Val
1                      5                      10                      15
Asn Thr Gly Lys Arg Ile Ala Leu Pro Thr Arg Val Glu Pro Lys Val
    20                      25                      30
Phe Phe Ala Asn Glu Arg Thr Phe Leu Ser Trp Leu Asn Phe Thr Val
    35                      40                      45
Ile Leu Gly Gly Leu Ala Val Gly Leu Leu Asn Phe Gly Asp Arg Val
    50                      55                      60
Gly Arg Ile Ser Ala Gly Leu Phe Thr Ile Ile Ala Met Ala Ala Met
    65                      70                      75                      80
Leu Tyr Ala Leu Phe Thr Phe His Trp Arg Ala Gln Ser Ile Arg Gln
                      85                      90                      95
Arg Gly Gln Ser Gly Ile Asp Asp Arg Tyr Gly Pro
    100                      105

```

<210> 43399  
 <211> 128  
 <212> PRT  
 <213> A.fumigatus

<220>

&lt;221&gt; UNSURE

&lt;222&gt; (37),(41),(52)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43399

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Lys | Ile | Glu | Thr | Cys | Thr | Thr | Gln | Glu | Asp | Ala | Gln | Val | Thr | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Lys | Asp | Gln | Lys | Leu | Glu | Pro | Ser | Thr | Ser | Val | Ala | Val | Ser | Gln |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Ala | Gly | Glu | Xaa | Asp | Ile | Pro | Xaa | Arg | Thr | Tyr | Arg | Gln | Lys | Ile |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Leu | Ile | Xaa | Tyr | Leu | Glu | Asp | Asp | Gln | Thr | Thr | Trp | Tyr | Gln | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe | Arg | Arg | Pro | Phe | Phe | Leu | Phe | Ala | Phe | Pro | Asn | Ile | Val | Leu | Ala |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Gly | Ile | Gln | Phe | Ala | Phe | Gly | Cys | Thr | Ala | Gly | Ile | Ile | Ser | Phe | Asn |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Thr | Ile | Ser | Glu | Ile | Met | Thr | Glu | Pro | Tyr | Asn | Trp | Ser | Ala | Gly |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     | 110 |     |     |     |
| Ser | Val | Gly | Leu | Leu | Phe | Leu | Ala | Ala | Leu | Val | Gly | Asn | Phe | Ile | Gly |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

&lt;210&gt; 43400

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43400

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Thr | Ser | Pro | Leu | Val | Pro | Leu | Gly | Thr | Ser | Gln | Pro | Ala | Asp | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | Val | Arg | Gln | Lys | Lys | Glu | Glu | Asp | Leu | Thr | Lys | Pro | Ser | Glu | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Asp | Ala | Val | Ser | Tyr | Leu | Pro | Ser | Gly | Ile | Met | Asp | Asp | Ala | Ser | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Glu | Val | Thr | Trp | Ser | Asn | Glu | Glu | Leu | Val | Gly | Ser | Arg | Arg | Phe | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Tyr | Ile | Asn |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43401

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43401

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Ile | Phe | Ser | Arg | Val | His | Thr | Leu | Leu | Pro | Val | Ser | Met | Arg | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Leu | Pro | Ala | Ala | Asp | Ala | Met | Leu | Glu | Met | Ile | Cys | Ile | His | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Pro | Ser | Pro | Val | Thr | Ala | Gln | Lys | Tyr | Arg | Ala | Glu | Thr | Leu | Tyr | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Gly | Pro | Met | Asp | Asp | Glu | Cys | Ala | Ile | Gly | Ile | Arg | Asp | Cys | Asp | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Lys | Ala | Pro | Leu | Met | Leu | Tyr | Val | Ser | Lys | Met | Val | Pro | Thr | Ser | Asp |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Lys | Gly | Arg | Phe | Tyr | Ala | Phe | Gly | Arg | Val | Phe | Ser | Gly | Ile | Val | Lys |

## 19587

|                                     |     |                             |     |  |     |
|-------------------------------------|-----|-----------------------------|-----|--|-----|
|                                     | 85  |                             | 90  |  | 95  |
| Ser Gly Leu Lys Val Arg Ile Gln Gly |     | Pro Asn Tyr Ile Pro Gly Lys |     |  |     |
|                                     | 100 |                             | 105 |  | 110 |
| Lys Asp Asp Leu Phe Val Lys Ala Ile |     | Gln Arg Thr Ile Leu Met Met |     |  |     |
|                                     | 115 |                             | 120 |  | 125 |
| Gly Arg Phe Val                     |     |                             |     |  |     |
|                                     | 130 |                             |     |  |     |

&lt;210&gt; 43402

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43402

|   |    |  |    |  |    |
|---|----|--|----|--|----|
| Val Thr Ser His Ile Asp Ser Glu Ala Asn Glu Arg Glu Ile Val Glu |    |  |    |  |    |
| 1   | 5  |  | 10 |  | 15 |
| Glu Glu Arg Ser Leu Thr Asp His Asn Asp Lys Gly Glu Gly Pro Glu |    |  |    |  |    |
|   | 20 |  | 25 |  | 30 |
| Thr Glu Ser Ala Trp Ala Asn Glu Ala Ile Thr Gly Leu Cys Ile Ser |    |  |    |  |    |
|   | 35 |  | 40 |  | 45 |
| Arg Thr Gly His Ile Phe Ala Thr Met Thr Asp Ser Ser Ile Ala Val |    |  |    |  |    |
|   | 50 |  | 55 |  | 60 |
| Trp Gln Thr Arg Val   |    |  |    |  |    |
|   | 65 |  |    |  |    |

&lt;210&gt; 43403

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (100)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43403

|   |     |  |    |  |    |
|---|-----|--|----|--|----|
| Pro Thr Thr Val Val Ala Ala Ile Ala Arg Ser Ala Ser Ser Met Lys |     |  |    |  |    |
| 1   | 5   |  | 10 |  | 15 |
| Thr Tyr Gly Ser Asn Val Ala Val Leu Met His Pro Asp Ser Thr Ile |     |  |    |  |    |
|   | 20  |  | 25 |  | 30 |
| Leu Ala Val Gln Thr Leu Gly Gly Tyr Leu Leu Thr Tyr Thr Ile Ala |     |  |    |  |    |
|   | 35  |  | 40 |  | 45 |
| Thr Asp Pro Thr Ser Arg Val Tyr Gln Gln His Phe Asp Gln Ser Ser |     |  |    |  |    |
|   | 50  |  | 55 |  | 60 |
| Gln Ser Arg Arg Gln Gln Leu Ala Arg Leu Ser Ala Glu Asp Asp Ala |     |  |    |  |    |
|   | 65  |  | 70 |  | 75 |
| Asn Ala Met Pro Asp Val Ser Leu Leu Pro Gln Gly Ala Lys Gly Arg |     |  |    |  |    |
|   | 85  |  | 90 |  | 95 |
| Gly Glu Ala Xaa Asn Pro His                                     |     |  |    |  |    |
|   | 100 |  |    |  |    |

&lt;210&gt; 43404

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (125)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43404

```

Pro Phe Asp Ala Tyr Ile Pro Gly Tyr Leu Leu Leu Ser Leu Gly Gly
1           5           10           15
Pro Phe Ile Phe Ile Ser Ser Phe Gln Leu Ser Asn Thr Phe Pro Thr
          20           25           30
Arg Ser Gly Leu Ile Leu Ser Met Leu Thr Gly Ala Phe Asp Ala Ser
          35           40           45
Ser Ala Leu Phe Leu Ile Phe Arg Leu Thr Asn Glu Arg Thr Asn Gly
          50           55           60
Ser Phe Thr Ser His Arg Phe Phe Met Val Tyr Leu Ile Val Pro Ala
65           70           75           80
Phe Ile Leu Ala Ala Gln Leu Leu Val Met Pro Ala Thr Ser Tyr Lys
          85           90           95
Thr Ala Gly Glu Leu Val Gln Gln Ala Glu Ala Tyr Ile Val Asp Glu
          100          105          110
Ala Asn Asp Arg Val Asp Glu Arg Ile His Ala Arg Xaa
          115          120          125

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&lt;210&gt; 43405

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43405

```

Phe Gly Thr Leu Gly Ser His Leu Val Ile Ser Val Glu Cys Leu Gly
1           5           10           15
Lys Thr Pro Gly Glu Glu Gly Gly Gln Met Tyr Thr Val Gly Pro Asn
          20           25           30
Tyr Trp Phe Lys His Phe Ser Pro Leu Ile Gly Arg Leu Thr Gly Thr
          35           40           45
Lys Asp Glu Val Gln Ser Ser Asp Gly Lys Lys Ala Val Ser Arg Tyr
          50           55           60
Lys Tyr Val Ile Ser Asp Leu Ala Thr Leu Asn Ala Asp Cys Leu Phe
65           70           75           80

```

&lt;210&gt; 43406

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43406

```

Pro Pro His Ala Ser Pro Pro Arg Cys Glu Asp Pro Met Leu Ala Gln
1           5           10           15
His Thr Val Ala Asn Asn His Gly Arg Glu Pro Pro Leu Gln Leu Leu
          20           25           30
Ser Pro Ala His Ile Ser Asn Gly Leu Pro Arg Thr Ser Tyr Gln Asp
          35           40           45
Ser Gln Leu Gln Thr Ser Pro Ala Ser Ser Lys Ser Gly Pro Ala Gly
          50           55           60
Ser Val Gln Arg Ser Asn Asn Gly Ser Leu Ser Lys Pro Leu Pro Thr
65           70           75           80

```

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 2 | 2 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 3 | 3 | 2 | 1 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 4 | 4 | 3 | 2 | 1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 5 | 5 | 4 | 3 | 2 | 1 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |

```
<210> 43407
<211> 190
<212> PRT
<213> A.fumigatus
```

```
<210> 43408
<211> 84
<212> PRT
<213> A.fumigatus
```

```

<400> 43408
Arg  Pro  Leu  Arg  Phe  Thr  Phe  Asp  Pro  Arg  Ala  Cys  Lys  Thr  Gly  Lys
1      5      10
Gln  Phe  Glu  Leu  Arg  Ser  Lys  Val  Ile  Gly  Val  Tyr  Asp  Lys  Gly  Lys
      20      25      30

```

# 19590

Ala Gly Ser Val Met Glu Thr Glu Gln Thr Ile Val Asp Lys Ala Thr  
 35 40 45  
 Gly Glu Ile Tyr Thr Lys Ile Val Ser Ser Gly Phe Phe Val Gly Gln  
 50 55 60  
 Gly Asn Trp Gly Gly Pro Lys Gly Gln Leu Leu Thr Ser Phe Phe Ser  
 65 70 75 80  
 Asn Cys Gly His

<210> 43409

<211> 114

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (93), (114)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43409

Ser Leu Asn Gly Asp Tyr Asn Pro Leu His Ala Thr Pro Glu Pro Gly  
 1 5 10 15  
 Gln Gln Met Gly Phe Gly Gly Thr Ile Ile His Gly Leu Phe Ser Trp  
 20 25 30  
 Asn Ser Thr Ala His Ala Val Leu Lys Ala Phe Gly Gly Ser Asp Pro  
 35 40 45  
 Asn Asn Phe Arg Glu Phe Gln Ala Arg Phe Ala Ser Pro Val Arg Pro  
 50 55 60  
 Gly Asp Arg Leu Thr Thr Glu Met Trp Arg Val Gly Asn Ala Thr Asp  
 65 70 75 80  
 Gly Phe Glu Lys Ile Arg Phe Val Thr Lys Asn Asp Xaa Gly Lys Val  
 85 90 95  
 Leu Leu Ser Asn Gly Pro Ala Leu Ile Lys Val Pro Asn Ser Gly Ser  
 100 105 110  
 Lys Xaa

<210> 43410

<211> 208

<212> PRT

<213> A.fumigatus

<400> 43410

His Tyr Phe Ser Thr Ala Ala Val Lys Thr Leu Met Thr His Val Pro  
 1 5 10 15  
 Met Lys Arg Lys Val Ile Leu Ser Val Leu Phe Ala Leu Ser Leu Ile  
 20 25 30  
 Leu Val Gly Ile Thr Cys Tyr Arg Val Pro Ser Val Ile Trp His His  
 35 40 45  
 Gly Ser Gln Gln Tyr Arg Ser Leu Leu Ala Ser Leu Glu Ile Leu Ala  
 50 55 60  
 Ala Thr Ala Val Ser Asn Ala Val Val Ile Gly Ser Phe Val Arg Asp  
 65 70 75 80  
 Lys Gly Val Lys Asn Ala Lys Phe Lys Lys Asp Val Gly Ser Ala Ser  
 85 90 95  
 Val Ser Glu Ser Met Asp His Ser Ser Thr Arg Arg Ala Thr Ile Thr

# 19591

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |     |
| Tyr | His | Gln | Trp | Gly | Ser | Asp | Ser | Asp | Leu | Ala | Gly | Asp | Leu | Gly | Ile |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Leu | Ala | Pro | Glu | Leu | Gln | Ala | Ser | Asp | His | Lys | Ile | Pro | Arg | Pro |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Pro | Ile | Ala | Val | Pro | Tyr | His | Pro | Leu | Thr | Ala | Gln | Thr | Gly | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Thr | Ala | Asn | Trp | Ser | Phe | Gly | Asn | Gln | Arg | His | Ser | Ile | Gly | Thr |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Asp | Asp | Asp | Lys | Thr | Ser | Thr | Thr | Gly | Ser | Leu | Glu | Leu | Lys | Ile | Ser |
|     | 180 |     |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Pro | His | Glu | Tyr | Ile | Glu | Thr | Ile | Lys | Thr | Pro | His | Lys | Lys | Val | Gln |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

<210> 43411

<211> 217

<212> PRT

<213> A.fumigatus

<400> 43411

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Tyr | Phe | His | Ala | Ala | Leu | Ile | Ile | Asn | Lys | Cys | Leu | Ser | Ser | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | Leu | Asn | Pro | Tyr | Phe | Ile | Phe | Cys | Leu | Lys | Pro | Asn | Asp | Arg | Arg |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Ile | Ala | Asn | Gln | Phe | Asp | Ser | Lys | Cys | Val | Arg | Ala | Gln | Val | Gln | Met |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Phe | Gly | Ile | Ala | Glu | Ile | Ser | Gln | Arg | Leu | Arg | Asn | Ala | Asp | Phe | Ser |
| 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Val | Phe | Leu | Pro | Phe | Ala | Glu | Phe | Leu | Gly | Leu | Ala | Glu | Ile | Gly | Asn |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ile | Val | Val | Gly | Ser | Asp | Lys | Glu | Lys | Ala | Glu | Val | Val | Leu | Asp | Glu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Lys | Arg | Trp | Pro | Gly | Asn | Glu | Ala | Thr | Val | Gly | Ser | Thr | Gly | Val | Phe |
|     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Leu | Ser | Glu | Arg | Cys | Trp | Ala | Asp | Leu | Ala | Lys | Val | Gly | Glu | Arg | Val |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Val | Pro | Val | Tyr | Ala | Ala | Asp | Met | Ser | Asp | Asp | Arg | Gly | Asp | Gly | Leu |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| Leu | His | Pro | Arg | Ser | Thr | Gly | Tyr | Gly | Asp | Ser | Lys | Val | Arg | Leu | Leu |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     | 160 |
| Asn | Pro | Ala | Asp | Gln | Ser | Pro | Gly | Ala | Phe | Ile | Tyr | Gly | Asp | Gln | Ala |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Lys | His | Gly | Tyr | Phe | Gly | Ser | Arg | Asp | Leu | Asp | Gly | Arg | Ser | Asp | Ala |
|     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |
| Gly | Asn | Ser | Ala | Phe | Asn | Ser | Gly | Asp | Met | Phe | Pro | Asn | His | Glu | Thr |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Arg | Glu | Gln | Met | Leu | Glu | Lys | Gly | Lys |     |     |     |     |     |     |     |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     |     |     |     |     |

<210> 43412

<211> 62

<212> PRT

<213> A.fumigatus

<400> 43412

Ile Gly Pro Ala Ser Leu Ala Gln Glu His Thr Ser Ala Ala Asp Cys

## 19592

```

1           5           10           15
Ser Leu Ile Ala Trp Pro Thr Leu Leu Ile Lys Asp Asp Phe Arg Phe
      20           25           30
Leu Phe Val Thr Ala Asn Asp Asp Val Ala Asn Phe Arg Gln Thr Lys
      35           40           45
Lys Leu Ser Glu Trp Lys Glu Asn Ala Lys Val Arg Val Pro
      50           55           60

```

&lt;210&gt; 43413

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43413

```

Ser Phe Gln Pro Xaa Gly Glu Asp Ser Phe Leu His Val Leu Asp Thr
1           5           10           15
Pro His Ser Arg Lys His Leu Arg Gly Gly Cys Glu Leu Glu Ala Val
      20           25           30
Leu Ala Pro Phe Thr Asp Ser Leu Ser Asp Ser Ile His Asn Gly Arg
      35           40           45
Leu Lys Ser Ser Ala Lys Ala Ile Ser Ala Met Leu Lys Thr Trp Pro
      50           55           60
Gly Leu Ile Ile Leu Ala Arg His Glu Ala Lys Pro Leu Gln Ser Leu
      65           70           75           80
Leu Glu Ser Leu His Tyr Pro Asp Pro Gln Ala Arg Asp Leu Ile Met
      85           90           95
Glu Leu Leu Phe Asp Ala Leu Arg Ile Lys Pro Pro Ser Trp Ser Ser
      100          105          110
Ser Phe Leu Ala Gly Arg Arg Leu Thr Thr Tyr Gly Arg Val Ala Asn
      115          120          125
Leu Arg Ser Glu Ser Asp Ala Lys Pro Val Arg Ala Phe Tyr Asp Ser
      130          135          140
Asn Asp Asp Arg Phe Asp Leu Thr Ala His Phe Ser Thr Leu Ile Leu
      145          150          155          160
Ala Thr Leu Ile Asp Ala Gly Leu Ser Gln Val Cys Phe Ser
      165          170

```

&lt;210&gt; 43414

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43414

```

Gly Arg Lys Gln Gly Phe Arg Cys Tyr Trp Arg Gly Lys Asn His Cys
1           5           10           15
His Gly Gln His Cys Val Gly Asp Cys Gly Val Asp Val Leu Leu Ser
      20           25           30
Arg Leu Val Asp Val Phe Asp Glu Val Leu Ala His Thr Ala Ala Ser
      35           40           45
Ser Asn Thr Ser Asn Glu Gly Glu Asp Gly Leu Arg Ile Thr Trp Lys
      50           55           60

```



## 19593

Asp Phe Lys Gly Gln Glu Pro Thr His Asn Cys Ala Asn Ile Gly Pro  
 65 70 75 80  
 Asp Val Leu Arg Gly Val Tyr Asn Leu Val Lys Gln Gly Arg Phe Asp  
 85 90 95  
 Cys Asp Ala Thr Glu Ile Ile Tyr Glu Arg Ala Leu Glu Asp Cys Ser  
 100 105 110  
 Gly Asp Val Asp Gln Ser Ser Ala Leu Phe Glu Arg Leu Lys Asp Ser  
 115 120 125  
 Ile Arg Asn Glu Leu Asp Cys Gln Val Cys Tyr Ser Leu Ile Thr Asp  
 130 135 140  
 Pro Leu Thr Thr Pro Cys Gly His Thr Phe Cys Arg Gly Cys Val Phe  
 145 150 155 160  
 Thr His Gly Gly Trp Gln Asp Pro Arg Leu Arg  
 165 170

&lt;210&gt; 43415

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43415

Leu Ser Ala Ser Leu Asp Asp Arg Arg Pro Ser Ala Lys Asp Gly Asp  
 1 5 10 15  
 Thr Asn Asn Ser His Arg Asp Lys Lys Pro Ser Thr Lys Ala Lys Pro  
 20 25 30  
 Met Lys Leu Asp Leu His Phe Thr Pro Ala His Pro Gln Glu Thr Thr  
 35 40 45  
 Thr Ser Lys Ala Glu Ser Pro Ala Gln Thr Ala Pro Thr Arg Tyr Val  
 50 55 60  
 Ala Ala Pro Val Ser Ala Val Gly Ser Arg Pro Asn Thr Pro Met Thr  
 65 70 75 80  
 Gly Val Ser Arg Ala Ser Asp Ser Ser Ala Pro Arg Gln Pro Arg Val  
 85 90 95  
 Leu Arg Val Val Asp Thr Pro Lys Thr Glu Thr Pro Pro Pro Ala Ser  
 100 105 110  
 Thr Ser Gln Ser Ser Ala Ser Leu Pro Thr Thr Leu Lys Thr Arg Ser  
 115 120 125  
 Arg Arg Pro Ser Ile Ser Ser Leu Ser Arg Pro Asp Thr Pro Gly Asp  
 130 135 140  
 Leu Gly Ser Glu Ala Asp Leu Tyr Thr Ser Ala Ser Ala Ser Arg Ala  
 145 150 155 160  
 Asn Ser Pro Pro Ala Ser Ser Arg Ile Gly Ser Ala Pro Val Arg Ser  
 165 170 175  
 Ile Ser Lys Ser Gln Gly Leu Arg Ala Gly Ala Arg Ser Ala Tyr  
 180 185 190

&lt;210&gt; 43416

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43416

Gly Val Tyr Ala Asp His Cys Leu Asn Trp Thr Asn Ser Leu Leu Ile  
 1 5 10 15  
 Val Leu Ala Val Val Ser Thr Ile Ser Trp Phe Ile Arg Tyr Arg Phe  
 20 25 30

| Variable             | Mean | Standard Deviation | Minimum | Maximum |
|----------------------|------|--------------------|---------|---------|
| Age                  | 34.5 | 12.5               | 18      | 65      |
| Gender               | 0.5  | 0.5                | 0       | 1       |
| Marital Status       | 0.6  | 0.5                | 0       | 1       |
| Education            | 12.5 | 2.5                | 9       | 16      |
| Income               | 3500 | 1500               | 1000    | 8000    |
| Health               | 0.8  | 0.2                | 0       | 1       |
| Smoking              | 0.3  | 0.5                | 0       | 1       |
| Alcohol              | 0.2  | 0.4                | 0       | 1       |
| Exercise             | 0.4  | 0.5                | 0       | 1       |
| Stress               | 0.6  | 0.5                | 0       | 1       |
| Sleep                | 0.7  | 0.3                | 0       | 1       |
| Diet                 | 0.5  | 0.5                | 0       | 1       |
| Work                 | 0.8  | 0.2                | 0       | 1       |
| Family               | 0.6  | 0.5                | 0       | 1       |
| Friends              | 0.7  | 0.4                | 0       | 1       |
| Hobbies              | 0.5  | 0.5                | 0       | 1       |
| Travel               | 0.4  | 0.5                | 0       | 1       |
| Shopping             | 0.6  | 0.5                | 0       | 1       |
| Reading              | 0.3  | 0.5                | 0       | 1       |
| Grooming             | 0.7  | 0.3                | 0       | 1       |
| Hygiene              | 0.8  | 0.2                | 0       | 1       |
| Organization         | 0.6  | 0.5                | 0       | 1       |
| Time Management      | 0.5  | 0.5                | 0       | 1       |
| Decision Making      | 0.7  | 0.4                | 0       | 1       |
| Problem Solving      | 0.6  | 0.5                | 0       | 1       |
| Emotional Stability  | 0.8  | 0.2                | 0       | 1       |
| Resilience           | 0.7  | 0.3                | 0       | 1       |
| Self-awareness       | 0.6  | 0.5                | 0       | 1       |
| Empathy              | 0.7  | 0.4                | 0       | 1       |
| Communication        | 0.8  | 0.2                | 0       | 1       |
| Leadership           | 0.5  | 0.5                | 0       | 1       |
| Teamwork             | 0.7  | 0.3                | 0       | 1       |
| Conflict Resolution  | 0.6  | 0.5                | 0       | 1       |
| Adaptability         | 0.7  | 0.4                | 0       | 1       |
| Initiative           | 0.6  | 0.5                | 0       | 1       |
| Accountability       | 0.8  | 0.2                | 0       | 1       |
| Integrity            | 0.9  | 0.1                | 0       | 1       |
| Trustworthiness      | 0.8  | 0.2                | 0       | 1       |
| Reliability          | 0.7  | 0.3                | 0       | 1       |
| Consistency          | 0.6  | 0.5                | 0       | 1       |
| Patience             | 0.5  | 0.5                | 0       | 1       |
| Perseverance         | 0.7  | 0.4                | 0       | 1       |
| Optimism             | 0.6  | 0.5                | 0       | 1       |
| Positivity           | 0.7  | 0.3                | 0       | 1       |
| Gratitude            | 0.8  | 0.2                | 0       | 1       |
| Forgiveness          | 0.6  | 0.5                | 0       | 1       |
| Humility             | 0.5  | 0.5                | 0       | 1       |
| Modesty              | 0.4  | 0.5                | 0       | 1       |
| Openness             | 0.7  | 0.4                | 0       | 1       |
| Curiosity            | 0.6  | 0.5                | 0       | 1       |
| Imagination          | 0.5  | 0.5                | 0       | 1       |
| Creativity           | 0.6  | 0.5                | 0       | 1       |
| Innovation           | 0.7  | 0.4                | 0       | 1       |
| Risk-taking          | 0.5  | 0.5                | 0       | 1       |
| Adventure            | 0.4  | 0.5                | 0       | 1       |
| Spontaneity          | 0.6  | 0.5                | 0       | 1       |
| Flexibility          | 0.7  | 0.3                | 0       | 1       |
| Adaptability         | 0.8  | 0.2                | 0       | 1       |
| Resilience           | 0.9  | 0.1                | 0       | 1       |
| Stress Management    | 0.7  | 0.4                | 0       | 1       |
| Emotional Regulation | 0.8  | 0.2                | 0       | 1       |
| Self-control         | 0.9  | 0.1                | 0       | 1       |
| Impulse Control      | 0.8  | 0.2                | 0       | 1       |
| Patience             | 0.7  | 0.3                | 0       | 1       |
| Perseverance         | 0.8  | 0.2                | 0       | 1       |
| Optimism             | 0.9  | 0.1                | 0       | 1       |
| Positivity           | 0.8  | 0.2                | 0       | 1       |
| Gratitude            | 0.9  | 0.1                | 0       | 1       |
| Forgiveness          | 0.8  | 0.2                | 0       | 1       |
| Humility             | 0.7  | 0.3                | 0       | 1       |
| Modesty              | 0.6  | 0.5                | 0       | 1       |
| Openness             | 0.8  | 0.2                | 0       | 1       |
| Curiosity            | 0.7  | 0.4                | 0       | 1       |
| Imagination          | 0.6  | 0.5                | 0       | 1       |
| Creativity           | 0.7  | 0.3                | 0       | 1       |
| Innovation           | 0.8  | 0.2                | 0       | 1       |
| Risk-taking          | 0.7  | 0.4                | 0       | 1       |
| Adventure            | 0.6  | 0.5                | 0       | 1       |
| Spontaneity          | 0.7  | 0.3                | 0       | 1       |
| Flexibility          | 0.8  | 0.2                | 0       | 1       |
| Adaptability         | 0.9  | 0.1                | 0       | 1       |
| Resilience           | 0.8  | 0.2                | 0       | 1       |
| Stress Management    | 0.7  | 0.4                | 0       | 1       |
| Emotional Regulation | 0.8  | 0.2                | 0       | 1       |
| Self-control         | 0.9  | 0.1                | 0       | 1       |
| Impulse Control      | 0.8  |                    |         |         |

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<210> 43417
<211> 166
<212> PRT
<213> A.fumigatus
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<210> 43418
<211> 185
<212> PRT
<213> A.fumigatus
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 43418 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Val         | Leu | Gly | Val | Ser | Ala | Glu | Pro | Thr | Ile | Trp | Ala | Pro | Ala | Ser | Glu |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu         | Ile | Gly | Arg | Arg | Trp | Pro | Ile | Thr | Val | Gly | Met | Ile | Gly | Tyr | Ser |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile         | Phe | Thr | Met | Gly | Thr | Ala | Thr | Ala | Lys | Asp | Thr | Gln | Thr | Leu | Phe |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

## 19595

Ile Thr Arg Phe Phe Gly Gly Leu Phe Ala Ala Gly Pro Phe Thr Ile  
 50 55 60  
 Glu Pro Asp Ala Phe Ala Asp Met Tyr Asn Asp Ser Gln Arg Gly Ile  
 65 70 75 80  
 Ala Ile Ala Met Phe Ala Met Ala Val Phe Val Gly Pro Phe Ala Ser  
 85 90 95  
 Pro Phe Thr Gly Gly Phe Ile Thr Met Ser Tyr Leu Gly Trp Arg Trp  
 100 105 110  
 Thr Met Tyr Ile Ser Ala Ile Met Gly Phe Phe Gly Val Val Leu Leu  
 115 120 125  
 Ile Phe Phe Tyr Lys Glu Thr Tyr Ala Pro Val Val Leu Met Glu Lys  
 130 135 140  
 Ala Ala Met Leu Arg Pro Gln Thr His Asp Trp Arg Ile His Ala Lys  
 145 150 155 160  
 Gln Asp Glu Val Glu Leu Asp Lys Leu Cys Met Asp Ser Ser Pro Gln  
 165 170 175  
 Gly Pro Lys Asp Pro Arg Lys Arg Pro  
 180 185

&lt;210&gt; 43419

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43419

Trp Asn Phe Arg Gly Pro Pro His Phe Ile Thr Leu Met Gly Lys Pro  
 1 5 10 15  
 Leu Thr Glu Val Val Ile Phe Arg Phe Arg Thr Tyr Tyr Thr Asn Ser  
 20 25 30  
 Tyr Leu Asn Ser Val Ile Pro Gln Glu Phe Ala Met Ile Ser Gly Asn  
 35 40 45  
 Ala Ser Ala His Ser Gln Ala Glu Ala Asp His Pro Tyr Asn Gly Leu  
 50 55 60  
 Glu Cys Phe Cys Glu Gly Ser Ser Glu Arg Glu Ser Asp Ile Ala Lys  
 65 70 75 80  
 Phe Pro Thr Ser Thr Cys Asp Gln His Leu Gln Leu Asn Leu Leu Phe  
 85 90 95  
 Pro Gln Cys Phe Asn Pro Asp Asp His Ser Glu Tyr Asp Phe Ala Asp  
 100 105 110  
 Glu Ser Asn Thr Cys Pro Glu Gly Met Leu Gln Met Pro Gln Leu Arg  
 115 120 125  
 Tyr Arg Val Gln Tyr Asp Thr Lys Ser Val Ala Pro Asp Gly Trp Ser  
 130 135 140  
 Gly Pro Ala Pro Phe Gln Leu Ser Cys Ser Asp Thr Pro Gly Asp Gly  
 145 150 155 160  
 Tyr Cys Phe His Ala Asp Phe Ile Asn Gly Trp Phe Glu Asp Ala Ala  
 165 170 175  
 Glu Asn Met Leu Ile Asn Gly Gly Gly Tyr Glu Asp Gly Gln Phe  
 180 185 190  
 Ile Ser Gly Glu His Gly Thr Ser Ala Val Lys Ala Thr Cys Thr Pro  
 195 200 205  
 Thr Asp Gln Asp Pro Asp Asn Gly Thr Ser Asp Tyr Tyr Thr Ser Leu  
 210 215 220  
 Glu Met Met Asp Asp Gly Ala Ala Ala Gly Asp Ala Val Ala Ser Asp  
 225 230 235 240  
 Ala Thr Val Ala Thr Gly Asp Ala Thr Ser Thr Ser Val Gly Leu His

## 19596

245  
His Asp Ala Ala Gly Ser Arg  
260

250

255

<210> 43420  
<211> 182  
<212> PRT  
<213> A.fumigatus

<400> 43420  
Tyr Pro Leu Thr Ala Ser Pro Cys Ser Pro Ala Gly Val Lys Gln Ala  
1 5 10 15  
Met Val Lys Val Ala Val Leu Leu Thr Glu Arg Tyr Gly Arg Val Leu  
20 25 30  
Arg Arg Gly Arg Lys Asp Arg Ile Lys Leu Leu Phe Gly Ser Leu Ala  
35 40 45  
Asp Val Gly Arg Arg Asn Val Ser Thr Ser Pro Asp Thr Glu Asp Val  
50 55 60  
Cys Arg Glu Thr Asp Asp Thr Val Lys Pro His Val Thr Gly Phe Glu  
65 70 75 80  
Val Asp Ala Pro Ala Asn Asp Asp Tyr Gly Asp Glu Asp Glu Asp Glu  
85 90 95  
Asp Asp Asp Asp Leu Ala Leu Ala Ala Leu Glu Ser Leu Asp Ala Ile  
100 105 110  
Asp Val Phe Lys His Asp Ser Arg Val Asp Lys Lys Val Tyr Glu Ala  
115 120 125  
Arg Ile Ser Val Ala Thr Leu Arg Arg Leu Leu Met Leu Phe Leu Val  
130 135 140  
Ile Ala Pro Leu Lys Thr Leu Glu Pro Val Thr Leu Tyr Thr Ser Asp  
145 150 155 160  
Leu Asn Glu Ala Arg Met Glu Ser Ile Arg Lys Glu Ala Asp Thr Ile  
165 170 175  
Leu Ala Ala Phe Ser Thr  
180

<210> 43421  
<211> 102  
<212> PRT  
<213> A.fumigatus

<400> 43421  
Cys Ser Asp Gly Tyr Thr Ser Phe Ile Asp Leu Leu Ile Asp Thr Arg  
1 5 10 15  
Val Val Leu Glu His Val Asn Ser Ile Gln Arg Phe Gln Gly Arg Gln  
20 25 30  
Gly Glu Ile Ile Ile Ile Leu Ile Leu Ile Leu Ile Pro Val Val Ile  
35 40 45  
Val Gly Arg Arg Ile Asp Leu Lys Ala Cys His Met Arg Phe Asp Ser  
50 55 60  
Ile Ile Cys Leu Pro Thr Tyr Ile Leu Arg Val Trp Arg Arg Ala Asp  
65 70 75 80  
Ile Thr Ser Pro Asn Val Ser Glu Thr Ser Glu Gln Glu Leu Asp Ala  
85 90 95  
Val Leu Ala Pro Ser Ser  
100

## 19597

<210> 43422  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 43422  
 Phe His Ser Asn Ile Val Leu Gln Trp Tyr Thr Lys Gln Glu Gln Asn  
 1 5 10 15  
 Asn Arg Val Asn Ile Trp Phe Ser Phe Asn Gly Trp Gly Gln Ile Phe  
 20 25 30  
 Gly Gly Leu Leu Pro Tyr Gly Ile Ala Val Gly Thr Ala Asn Asn Gly  
 35 40 45  
 Ser Ala Ile Glu Pro Trp Lys Ile Val Phe Leu Phe Thr Gly Leu Leu  
 50 55 60  
 Thr Met Ala Leu Gly Val Ile Phe Leu Trp Val Val  
 65 70 75

<210> 43423  
 <211> 196  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (12), (14), (19), (24), (25), (27), (30), (40), (122)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43423  
 Ala Ile Leu Arg Ala Cys Pro Val Thr Ile Glu Xaa Arg Xaa Thr Gly  
 1 5 10 15  
 Pro Pro Xaa Phe Lys Ile Gly Xaa Xaa Ser Xaa Glu Asp Xaa Pro Trp  
 20 25 30  
 Cys Pro Val Cys Leu Ser Ser Xaa Ile Ser Lys Arg Trp Asn Ile Arg  
 35 40 45  
 Pro Leu Pro Leu Lys Gln Val Ile Arg His His Ser Leu Gln Asn Leu  
 50 55 60  
 Ser Leu Ala Ile Asp Glu Leu Val Ser Asp Pro Arg Thr Val Ser Thr  
 65 70 75 80  
 Met Pro Phe Leu Glu Met Thr Pro Val Ala Arg Asn Gly Gln Leu Pro  
 85 90 95  
 Leu Ser Tyr Leu Glu Lys Glu Met Leu Leu Asn His Leu Ile Ser Gly  
 100 105 110  
 Gly Ser Pro Ala Gly Asn Met Asn Pro Xaa Cys Asn Tyr Phe Phe Leu  
 115 120 125  
 Phe Asn Ala Glu Thr Pro Ala His Ala Ser His Arg Val Thr Ala Tyr  
 130 135 140  
 Val Glu Val Ser Arg Thr Thr Tyr Ser Val Ile Glu Gly Thr Leu Tyr  
 145 150 155 160  
 Arg Gln Gln Ala Pro Arg Ser Val Asn Val Pro Pro Val Val Gln Thr  
 165 170 175  
 Gly Asn Pro Cys Ser Tyr Val His Gly Arg Ile Thr Leu Ser Phe Asp  
 180 185 190  
 Ser Thr Thr Gln  
 195

<210> 43424

19598

<211> 96  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (50)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43424  
Arg Leu Phe Ser Thr Arg Pro Leu Ser Asp Ser Arg His His Ser Ser  
1 5 10 15  
Leu Leu Arg Tyr Lys Ala Val Glu Met Ser Gly Pro Val Asp Thr Ala  
20 25 30  
Lys Ser Ile Thr Lys Lys Arg Lys Arg Lys His Gly Gly Gly Ala Arg  
35 40 45  
Ala Xaa Thr Glu Thr Asp Asp Ala Ile Thr Arg Pro Ala Ile Glu Asn  
50 55 60  
Gly Ala Val Asn Asp Ser Pro Glu Lys Glu Glu Asp Thr Lys Lys Ser  
65 70 75 80  
Glu Lys Asn Gly Lys Asp Lys Ser Ala Lys Lys Arg Lys Val Ser His  
85 90 95

<210> 43425  
<211> 74  
<212> PRT  
<213> A.fumigatus

<400> 43425  
Ala Arg Leu Ala Gln His Gly Glu Arg Leu Leu Gln Ala Ser Gly Arg  
1 5 10 15  
Phe Val Val Ser Tyr Pro Val Ser Leu Thr Trp Ile Arg Ile Ser Ala  
20 25 30  
Asp Phe Tyr Ser Pro His His Pro Leu Ser Ser Ser Thr Gly Thr His  
35 40 45  
Thr Phe Leu Ser Phe Ser Tyr Lys Lys Gln Lys Gly Val Tyr Met Thr  
50 55 60  
Met Tyr Tyr Asn Pro Arg Val Tyr Ser Thr  
65 70

<210> 43426  
<211> 156  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (122), (154)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43426  
Lys Pro Arg Pro Ser Asp Val Ile Leu Ala Met Ala Leu Arg Thr Ser  
1 5 10 15  
Ala Asp Asn Ala Glu Asp Val Ala Ala Gly Phe Arg Met Leu Arg Asp  
20 25 30  
Pro Leu Pro Glu His Ala Thr Glu Ile Thr Ser Leu Ile Ala Asp Leu

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Pro | Ala | Met | Gly | Phe | Gln | Ala | Asn | Pro | Leu | Leu | Gln | Lys | Xaa |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Thr | Gly | Met | Asn | Lys | Gly | Gly | Phe | Pro | Arg | Pro | Lys | Gly | Ala | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Asp | Phe | Phe | Thr | Leu | Ala | Trp | Lys | Glu | Phe | Phe | Arg | Gly | Ser | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Ser | Leu | Glu | Ile | Gly | Ala | Lys | Phe | Arg | Val | Asp | Val | Tyr | Glu | Trp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Phe | Gly | Asp | Lys | Ala | Xaa | Tyr | Leu | Gly | Gly | Ala | Asn | Ile | Asn | Leu |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Met | Xaa | Glu | Pro | Phe | His | Ser | Gln | Glu | Val | Thr | Leu | Thr | Leu | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Lys | Ser | Gly | Ala | Ile | Arg | Leu | Asn | Leu | Leu | Phe | Lys | Ser | Asn | Tyr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Met | Arg | Ser | Arg | Gln | Gly | Ser | Ser | Thr | Phe | Ser | Gly | Thr | Phe | Ala |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Thr | Pro | Gly | Lys | Ile | Val | Gly | Ala | Pro | Val | Lys | Gly | Val | Gly | Phe | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Gly | Asn | Val | Ile | Lys | Gly | Ala | Ser | Phe | Leu | Lys | His | Gly | Ile | Met |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Ser | Arg | Phe | Lys | Gly | Asp | Asp | Ser | Ser | Ser | Asp | Glu | Ile | Pro | Glu | Glu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Pro | Glu | Glu | Val | Ser | Lys | Thr | Glu | Thr | Thr | Gln | Thr | Pro | Ser | Ala | Ile |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Leu | Val | Asp | Gly | Ala | Thr | Pro | Pro | Ser | Ser | Thr | Pro | Asn | Ser | Leu | Gln |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| His | Ala | Arg | Thr | Arg | Ser | Val | Val | Ser | His | Phe | Gly | Asp | Arg | Leu | Gly |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Gly | Gly | Ser | Ala | Gly | Lys | Gly | Glu | Thr | Gly | Thr | Ala | Thr | Ile | Thr |

## 19600

```

225          230          235          240
Val Val Ser Ala Ser Asn Tyr Pro Pro Ser Ser Asn Val Arg Val Ile
          245          250          255
Ile Lys Ala Leu Gly Pro Lys Gly Ala Lys Glu Val Leu Lys Thr Lys
          260          265          270
Ala Ile Lys Ala Ser Gly Gly Leu His His Arg Gly Arg Arg Leu Arg
          275          280          285
Ala Lys Arg Asn
          290

```

&lt;210&gt; 43428

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43428

```

Arg Leu Gln Phe Glu Arg Gly Thr Ile Ser Tyr Met Leu Thr Ser Thr
1          5          10          15
Leu Thr Lys Pro Thr Thr Met Asn Pro Thr Val Ser Cys Arg Arg Arg
          20          25          30
Val Asn Phe Leu Glu Asn Ile Asp Ile Ala Pro Phe Pro Ala Pro Lys
          35          40          45
Ala Arg Ile Val Thr Leu Glu Pro Val Thr Arg Arg Ser Lys Pro Lys
          50          55          60
Gly Lys Ala Lys Ser Val Glu Ser Asp Ala Ala Ala Asp Val Gln Ser
65          70          75          80
Arg Glu Pro Ser Leu Asn Gly Ser Gly Ala Val Gly Asp Asn Arg Pro
          85          90          95
Pro Leu Ser Pro Ala Pro Ser Asn Val Ser Ser Ser Ser Arg Leu Ser
          100          105          110
Asn Ser Ser Gln Ser Phe Gln Leu Ala Ser Asp Pro Ser Ser Ser Ala
          115          120          125
Gly Thr Gly Val Arg Asn Gly Ser Ile Thr Pro Ser Ile Ala Asp Lys
          130          135          140
Thr Ile Thr Ala Lys Thr Glu Leu Phe Thr Gly Trp Cys Leu His His
145          150          155          160
Glu Ala Ala Lys Asp Pro His
          165

```

&lt;210&gt; 43429

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (8), (13), (219)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43429

```

Leu Ala Ser Leu Val Ile Ser Xaa Glu Asn Leu Ile Xaa Gly Gln Pro
1          5          10          15
Asp Thr Asp Leu Ser Asn Val Thr Gly Gln Met Phe Asn Asn Arg Val
          20          25          30
Tyr Glu Met Ser Ile Ala Lys Pro Gly Gln Pro Val Ser Ala Cys Lys
          35          40          45

```



## 19601

Val Pro Glu Ser Leu Thr Glu Ala Ile Glu Asn Ser Ile Gln Ala His  
 50 55 60  
 Pro Asp Ile Tyr Ala Val Glu Gly Leu Thr Gly Arg Leu Thr Tyr Arg  
 65 70 75 80  
 Glu Phe Gly Arg Met Thr Glu His Ile Ser Gln Arg Leu Leu Gln His  
 85 90 95  
 Ile Gln Pro Gly Ser Val Ala Cys Met Ile Ser Asp Gly Ser Leu Leu  
 100 105 110  
 Trp Leu Leu Ala Met Val Ala Ile Ile Arg Ala Gly Ala Ile Tyr Cys  
 115 120 125  
 Pro Val Asp Glu Lys Leu Pro Arg Asp Arg Lys Asp Tyr Met Val Arg  
 130 135 140  
 Asn Ser Arg Ala Ala Leu Ile Leu Tyr Ala Asn Ser Ser Gln Glu Pro  
 145 150 155 160  
 Leu Cys Asn Gly Val Pro Ser Leu Asn Met Glu Ser Ile Met Gln Glu  
 165 170 175  
 Ile Ser Ser Ser Ser Gly Ser Pro Ile Ala Thr Ser Arg Asn Arg Pro  
 180 185 190  
 Ser Gly Asp Thr Val Ala Cys Leu Val Tyr Thr Ser Gly Ser Thr Gly  
 195 200 205  
 Leu Pro Lys Gly Met Leu Asn Phe Lys His Xaa Thr Leu Phe Ser His  
 210 215 220  
 Thr Gly Ala Gly Ser Ile Ser Ala Val His  
 225 230

&lt;210&gt; 43430

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43430

Tyr Phe His Pro Ala Ile Thr Ser Gln Pro Pro Leu Leu Trp Ile Pro  
 1 5 10 15  
 Arg Asp Lys Leu Gly Val Ser Lys Gln Glu Val Lys His Thr Ala Arg  
 20 25 30  
 Val Ile Pro Ile Thr Asp Glu Asp Ala Trp Leu Asp Asp Lys Asn Lys  
 35 40 45  
 Ile His Trp Asp Val Asp Lys Gly Val Pro Pro Ile Phe Glu Glu Lys  
 50 55 60  
 Ile Tyr Tyr  
 65

&lt;210&gt; 43431

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43431

Asp Ile Ser Gln Ile Arg Val Lys Asn Leu Glu Ser Lys Thr Tyr Ile  
 1 5 10 15  
 Asp Lys Thr Gln Asn Ala Thr Thr His Thr Glu Asn Ser Pro Ala Leu  
 20 25 30  
 Glu Ile Asp Lys Glu Thr Asp Arg Val Tyr Arg Ala Leu Asp Pro Lys  
 35 40 45  
 Val Pro Ile Ile Val Ala Ser Ala Ala Asp Asp Lys Pro Ile Phe Ser  
 50 55 60

## 19602

Val Thr Arg Glu Gly Leu Asn Asp Val Val Val Trp Asn Pro Trp Ile  
 65 70 75 80  
 Glu Lys Ala Lys Gly Met Ala Asp Phe Ser Pro Asp Asp Ala Tyr Lys  
 85 90 95  
 Lys Met Ile Cys Ile Glu Ala Gly Ser Val Ala Ser Trp Gln Thr Leu  
 100 105 110  
 Glu Ala Gly Glu Ser Trp Glu Gly Ser Gln Ser Ile Arg Pro Arg Leu  
 115 120 125

<210> 43432  
 <211> 200  
 <212> PRT  
 <213> A.fumigatus

<400> 43432  
 Gly Val Ser Gly Phe Leu Asp Gln Tyr Ala Arg Tyr Asp Asp Phe Glu  
 1 5 10 15  
 Asn Phe Met Arg Leu Tyr Ala Thr Ser Arg Thr Asp Val Asn Phe Thr  
 20 25 30  
 Val Val Ser Ile Asn Asp Gly Leu Asn Leu Gln Asp Ser Ser Leu Ser  
 35 40 45  
 Ser Thr Glu Ala Ser Leu Asp Val Gln Tyr Ala Tyr Ser Leu Ala Tyr  
 50 55 60  
 Lys Ala Leu Gly Thr Tyr Tyr Thr Thr Gly Gly Arg Gly Pro Val Val  
 65 70 75 80  
 Pro Glu Glu Gly Gln Asp Thr Asn Val Ser Thr Asn Glu Pro Tyr Leu  
 85 90 95  
 Asp Gln Leu His Tyr Leu Leu Asp Leu Pro Asp Glu Glu Leu Pro Ala  
 100 105 110  
 Val Leu Ser Thr Ser Tyr Gly Glu Asp Glu Gln Ser Val Pro Glu Ser  
 115 120 125  
 Tyr Ser Asn Ala Thr Cys Asn Leu Phe Ala Gln Leu Gly Ala Arg Gly  
 130 135 140  
 Val Ser Ile Ile Phe Ser Ser Gly Asp Ser Gly Val Gly Ser Thr Cys  
 145 150 155 160  
 Ile Thr Asn Asp Gly Thr Lys Thr Thr Arg Phe Leu Pro Val Phe Pro  
 165 170 175  
 Ala Ser Cys Pro Phe Val Thr Ala Val Gly Gly Thr His Val Val Phe  
 180 185 190  
 Ala Lys Gly Gly Arg Ser Ala Ser  
 195 200

<210> 43433  
 <211> 157  
 <212> PRT  
 <213> A.fumigatus  
 <220>  
 <221> UNSURE  
 <222> (15), (20)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43433  
 Ala Arg Trp Lys Tyr Asn Gln Ile Phe Ser Arg Arg Ser Ile Xaa Trp  
 1 5 10 15  
 Gly Leu Ser Xaa Leu Pro Leu Leu Gln Ser Lys Leu Leu Trp Ala Leu

[illegible]

```
<210> 43434
<211> 67
<212> PRT
<213> A.fumigatus
```

```
<210> 43435
<211> 61
<212> PRT
<213> A.fumigatus
```

```
<210> 43436
<211> 65
<212> PRT
<213> A.fumigatus
```

## 19604

```

Ser Lys Met Ala Glu Lys Arg Ser Asp Val Asp Ile Asp Ala His Pro
1           5           10           15
Val His Glu Arg Arg Asp Asp Ala Leu Asp Tyr Leu Asp Glu His Ala
          20           25           30
Asn Val Gln Asp Glu Ala Thr Val Asp Leu Ala Ala Leu Arg Arg Lys
          35           40           45
Ile Asp Tyr Arg Met Ser Ser Pro Arg Gly Trp Lys Glu Thr Gln Cys
          50           55           60
Val
65

```

&lt;210&gt; 43437

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (24), (31), (59)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43437

```

Gly Asp Lys Leu Asn Ser Asp Glu Pro Ala Leu Leu Arg Thr Lys His
1           5           10           15
Gly Met Arg Lys Trp Leu Arg Xaa Gln Lys Gln Ser Ile Ala Xaa Ser
          20           25           30
Asp His Ser Arg Asp Ala Asn Ser Gln Ala Met Asp Ala Asp Ala Ala
          35           40           45
Gly Glu Thr Leu Ala Glu Gly Ile Glu Gly Xaa Gln Glu Arg Val Ile
          50           55           60
Pro Arg Leu Leu Arg Pro His Val Trp Cys Ser
65           70           75

```

&lt;210&gt; 43438

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (8), (37), (74), (82)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43438

```

Xaa Thr Arg Asn Arg Ala Ser Xaa Lys Val Ile Thr Pro Ala Met Gln
1           5           10           15
Thr Arg Arg Pro Trp Met Arg Met Leu Leu Val Arg Pro Trp Pro Arg
          20           25           30
Ala Leu Lys Val Xaa Lys Lys Glu Ser Phe Pro Asp Tyr Tyr Asp Leu
          35           40           45
Met Ser Gly Val Pro Asp Leu Pro Glu Gln Leu Leu Trp Lys Glu Asp
          50           55           60
Ala Asp Trp His Val Leu Asp Ala Ser Xaa Glu Val Pro Arg Tyr Leu
65           70           75           80
Pro Xaa Gly Ala Phe Cys Phe Ile Pro Asp Tyr Asn
          85           90

```

19605

<210> 43439  
 <211> 188  
 <212> PRT  
 <213> A.fumigatus

<400> 43439  
 Gln Ser Thr Val Arg Arg Arg Glu Ser Pro Ile Ser Gln Glu Glu Thr  
 1 5 10 15  
 Gln Ile Ala Val Glu Leu Ile Phe Ala Val Ile Asn Glu Leu Tyr Ser  
 20 25 30  
 Leu Ser Ser Ala Trp Asn Ile Arg Arg Thr Leu Leu Asn Ala Ala Lys  
 35 40 45  
 Ser Tyr Ile Leu Arg Pro Gly Ser Pro Ser Leu Glu Thr Ile Arg Ser  
 50 55 60  
 Leu Leu Gln Glu Ser Met Ile Asp Ala Asn Ile Ser Asp Ala Ser Ile  
 65 70 75 80  
 Ala Ser Tyr Leu Thr Lys Leu Arg Glu Asn Val Leu Pro Thr Lys Glu  
 85 90 95  
 Glu Leu Glu Ser Trp Pro Gln Pro Pro Ser Ser Val Glu Lys Glu Arg  
 100 105 110  
 Met Arg Glu Ile Ala Arg Lys Thr Leu Val Leu Lys Gly Leu Pro Gln  
 115 120 125  
 Ala Leu Thr Ser Val Met Gly Ala Ala Ala Ser Arg Glu Ser Leu Glu  
 130 135 140  
 Arg Val Phe Asp Cys Leu Gln Val Glu Met Ile Ala Arg Gly Phe Val  
 145 150 155 160  
 Tyr Ser Ile Leu Leu His Ala Leu Arg Ala Leu Ser Tyr Thr Asp Arg  
 165 170 175  
 Ala Gly Arg Thr Arg Ala Arg Arg Asn Ser Trp Gly  
 180 185

<210> 43440  
 <211> 167  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (97),(102)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43440  
 Phe Arg Ala Asp Gly Trp Glu Glu Ser Leu Met Asp Ser Pro Asn Arg  
 1 5 10 15  
 Phe Leu Gln Asn Gly Pro Arg Gly Pro Gly Pro Arg Ser Val Tyr Ser  
 20 25 30  
 Gly Tyr Ser Val Asn Arg Ser Asp His Thr Leu Leu Val Gly Glu Phe  
 35 40 45  
 Phe Arg Glu Ser Pro Lys Asn Pro Ile Val Leu Val Lys Tyr Pro Trp  
 50 55 60  
 Asn Thr Asn Ser Gly Lys Leu Lys Thr Asn Asp Lys Ser Ile Val Thr  
 65 70 75 80  
 Ala Thr Phe Ala His Cys Ala Asp Phe Leu Arg Met Gln Gly Gly Phe  
 85 90 95  
 Xaa Tyr Asp Asn Thr Xaa Tyr Ile Ser Arg Ser Asn Gly Arg Ser Pro

## 19606

```

          100              105              110
Lys Ala Gly Asp Met Phe Lys Trp Lys Pro Gly Lys Pro Ala Glu Leu
          115              120              125
Arg Asn Arg Trp Phe Met Ala Gly Asn Glu Asp Leu Ser Tyr Asn Lys
          130              135              140
Val Arg Lys Glu Tyr Tyr Thr Val Ser Glu Tyr Asp Gly Glu Arg Phe
          145              150              155              160
Ile Leu Ala Tyr Asn Lys Met
          165

```

<210> 43441  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43441
Lys Thr Thr Val Asp His Met Lys Gly Leu Gly Ala Asp Val Ile Phe
1          5          10          15
Ala Val Asp Val Gly Ser Ile Asp Asp Asn Thr Pro Gln Val Tyr Gly
          20          25          30
Asp Ser Leu Ser Gly Phe Trp Ser Val Phe Asn Arg Trp Asn Pro Phe
          35          40          45
Ser Ser Cys Pro Tyr Pro Pro Thr Leu Ser Glu Ile Gln Ala Arg Leu
          50          55          60
Ala Tyr Val Ser Ser Ile Asp Asn Leu Glu Arg Ala Lys Asn Ile Pro
65          70          75          80
Gly Cys Leu Tyr Met Arg Pro Pro Ile Asp Gly Tyr Ser Thr Leu Glu
          85          90          95
Phe Gly Lys Phe Asp Glu Ile Tyr Gln Val Gly Tyr Ala Phe Gly Lys
          100          105          110
Gln Phe Leu Glu Lys Leu Lys Ser Glu Gly Ser Leu Pro Leu Ser Glu
          115          120          125
Glu Thr Glu Glu Asn Lys Lys Leu Leu Arg Thr Leu Ala Pro Arg Arg
          130          135          140
Ala Ser Ile
145

```

<210> 43442  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43442
Phe Leu Leu Arg Tyr Ser His Glu Met Lys Lys Val Gln Ser Lys Leu
1          5          10          15
Asp Ser Val Val Trp Val Arg Gly Leu Leu Ser Phe Glu Asp His Glu
          20          25          30
Ser Leu Pro Ile Thr Met Ala Phe Leu Ser Glu Phe Ile Arg Val Ala
          35          40          45
Gly Met Leu Pro Phe Ala Ala Leu Arg Pro Tyr Cys Pro Gln
          50          55          60

```

<210> 43443  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43443

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Tyr | Ser | His | Phe | Asn | Gly | Leu | Ser | Asn | Thr | Leu | Ser | Pro | Pro | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Ala | Val | Thr | Pro | Val | Asn | Thr | Ile | Ser | Pro | Pro | Tyr | Pro | Leu | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Pro | Tyr | Pro | Ala | Leu | His | Phe | Ser | Pro | Ala | Ile | Lys | Ala | Ser | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asn | Gly | Pro | Leu | Ser | Thr | Phe | Pro | Ile | Pro | Arg | Pro | Glu | His | Lys | Asn |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Asn | Thr | Met | Pro | Gly | Ser | Ala |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43444

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43444

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Ser | Leu | Asn | Ile | Ala | Val | Gln | Asp | Gly | Pro | Glu | Ala | Gly | Gln |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Ala | His | Val | His | Ala | His | Ile | Ile | Pro | Arg | Lys | Arg | Ala | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Asp | His | Arg | Gly | Gly | Met | Asp | Ala | Val | Tyr | Asp | Leu | Leu | Asp | Gly |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Glu | Glu | Gly | Asp | Leu | Arg | Arg | Ala | Phe | Glu | Glu | Gly | Lys | Glu | Gly | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Arg | Pro | Arg | Ala | Lys | Phe | Pro | Ala | Val | Asp | Asn | Glu | Gly | Arg | Ser |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Pro | Arg | Ser | Met | Glu | Glu | Met | Glu | Ala | Glu | Ala | Glu | Met | Leu | Ala | Arg |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Glu | Met | Glu | Arg | Met | Glu | Arg | Glu | Val | Val | Gly |     |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

&lt;210&gt; 43445

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2), (3), (6), (45), (51), (119), (121)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43445

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Xaa | Xaa | Asp | Leu | Xaa | Thr | Gly | Arg | Pro | Val | Arg | Pro | Ser | Arg | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Ser | Thr | Arg | Thr | Pro | Gln | Gly | Ala | Trp | Ala | Pro | Ala | Lys | Gly | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Leu | Pro | Lys | Asp | Gln | Phe | Gly | Gly | Tyr | Ser | Cys | Xaa | Trp | Gly | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Phe | Asp | Xaa | Asp | Ser | Lys | Ile | Asn | His | Gly | Trp | Ser | Gly | Trp | Asp | Val |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Ser | Ala | Ile | Gln | Ala | Glu | Asn | Ala | His | His | Glu | Val | Gln | Gly | Met | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Cys | Asn | His | Ala | Gly | Glu | Leu | Cys | Ser | Ile | Ile | Ser | His | Gly | Leu |

## 19608

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Ser | Lys | Val | Ile | Asp | Ala | Tyr | Thr | Ala | Asp | Leu | Ala | Gly | Val | Asp | Gly |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Gly | Gly | Lys | Val | Val | Xaa | Gly | Xaa | Thr | Arg | Leu | Val | Val | Asn | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Tyr | Lys | Glu |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43446

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (137)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43446

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Cys | Leu | Leu | Thr | Ala | Leu | Glu | Arg | Glu | Arg | Asn | Gln | Ser | Ser | Lys |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Met | Gly | Leu | Arg | Leu | Arg | Pro | Pro | Lys | Gln | Ser | Gln | Arg | Val | Leu | Pro |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Lys | Pro | Pro | Lys | Gly | His | Phe | Phe | Phe | Ala | Gly | Arg | Glu | Phe | Ala |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Arg | Leu | Pro | Trp | Trp | Lys | Arg | Arg | Asn | Met | Arg | Thr | Leu | Tyr | Ile | Phe |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Ile | Val | Ile | Leu | Ile | Leu | Thr | Asn | Thr | Ala | Asn | Gly | Phe | Asp | Gly | Ser |
|     | 65  |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Met | Met | Asn | Gly | Leu | Gln | Thr | Leu | Ser | Tyr | Trp | Gln | Asn | Tyr | Phe | Asn |
|     |     | 85  |     |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| His | Pro | Arg | Gly | Ser | Ile | Leu | Gly | Leu | Phe | Asn | Ala | Ser | Met | Ser | Leu |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Gly | Ser | Leu | Ile | Gly | Leu | Phe | Ile | Val | Pro | Tyr | Leu | Ile | Asp | Trp | Ala |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Arg | Lys | Ile | Gly | Leu | Ala | Ile | Xaa | Cys | Val | Ile | Met | Leu | Leu | Ala |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| Val | Ala | Leu | Gln | Ser | Gly | Ala | Thr | Asn | Phe | Gly | Met | Phe | Val | Ala | Ala |
|     | 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Ile | Ile | Leu | Arg | Phe | Gly | Asp | Cys | Ile | Val | Leu | Gly | Asn | Ala | Pro |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Leu | Leu | Ile | Gly | Glu | Ile | Gly | Pro | Pro | Gln | Asp | Arg | Ala | Ile | Leu | Leu |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Thr | Leu | Arg | Gly | Thr | Pro | Tyr | His | Ser | Arg | Gly | Ile | His | Thr | Gln | Leu |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Gly | Tyr | Pro | Leu | Val | Thr | Leu | Pro | Ile | Lys | Val | Asn | Phe | Pro | Glu | Leu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Phe | Ala | Ser | Leu | Gly | Ser | His | Trp | Leu | Cys | Gln | Ile | Gly | Leu | Lys | Asn |
|     | 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Lys | Trp | Phe | Leu | Gly | Ile | Ala | His | Phe | Leu | Ala | Thr | Pro | Leu | Pro | Pro |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |     |
| Tyr | Ser | Leu | Leu | Pro | Ala | Ser | Gly | Gly | Ile | Pro | Lys | Asn | Pro | Leu | Gly |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |

&lt;210&gt; 43447

&lt;211&gt; 69



19609

<212> PRT

<213> A.fumigatus

<400> 43447

```

Phe Val His Leu Cys Ser Gly Gly Val His Ile Tyr Gln Asn Phe Leu
1           5           10           15
Gly Tyr Leu Gln Ala Leu Gly Tyr Lys His Trp Ile Lys Ile Phe Thr
          20           25           30
Ser Lys Gln Thr Lys Ile His Ala Asn Ile Gly Leu Ser Gly His Phe
          35           40           45
Ile Ser Arg His Ser Glu Ala Ser Ala Gly Asn Ser Ile Leu Arg Phe
          50           55           60
Met Ala Arg Tyr Ile
65

```

<210> 43448

<211> 70

<212> PRT

<213> A.fumigatus

<400> 43448

```

Ser Ser Ala Val Ile Glu Arg Leu Phe Cys Cys Phe Ser Ala Tyr Phe
1           5           10           15
Leu His Leu Pro Ser Phe Phe Pro Ser Leu Phe Ile Phe Phe Ser Ser
          20           25           30
Leu Phe Ile Phe Leu His Pro Leu Phe Ile Pro Phe Ile Tyr Val Ser
          35           40           45
Leu Tyr Phe Leu Gln Pro Ala Ser Tyr Ser Ile Pro Leu Pro Phe Leu
          50           55           60
Thr Tyr Leu Phe Phe Phe
65           70

```

<210> 43449

<211> 136

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (113)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43449

```

Lys Met Trp Arg Ser Leu Arg Leu Leu Ile Ser Lys Lys Ser Val
1           5           10           15
Thr Gln Tyr Val Leu Thr Leu Val Ser Gly Thr Asp Asp Arg Gln Val
          20           25           30
Arg Thr Tyr Arg Ala Ser Ser Ser Arg Asn Met Gln Ala Thr Lys Gln
          35           40           45
Pro Pro Phe Val Arg Leu Asp Leu Asp Val Arg Leu Ser Arg Leu Asp
          50           55           60
Asp Asp Ala Glu Pro Gly Leu Val Pro Ser Glu Pro Ile Ser Ala Lys
65           70           75           80
Tyr His Ala Pro Glu Glu Glu Ile Ser Leu Gly Pro Ala Cys Trp Leu
          85           90           95
Trp Asp Tyr Leu Arg Lys Asn Gly Ala Ala Gly Phe Phe Leu Pro Pro

```

## 19610

100 105 110  
 Xaa Arg Glu Val Leu Thr Ala Ala Leu Gln Leu Ile Ile Val His Ser  
 115 120 125  
 Met Leu Arg Glu Ile Val Lys Ala  
 130 135

<210> 43450  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 43450  
 Leu Val Asn Pro Ile Thr Trp Tyr Gly Asp Thr Ile Thr Phe Ser His  
 1 5 10 15  
 Asn Asp Pro Gly Val Glu Ile Ile Ser Asn Ser Ser Gly Ser His His  
 20 25 30  
 Glu Leu Lys Lys Leu Asp Thr Arg Val Asn Leu Ile Thr Gln Ala Thr  
 35 40 45  
 Lys Leu Val Ser Ile Leu Leu Val Cys Leu Leu Val Ser Arg Thr Asp  
 50 55 60  
 Thr Leu Val  
 65

<210> 43451  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 43451  
 Ser Gly Gly Ile Tyr Leu Tyr Ala Asn Gln Gln Gly Cys Asp Gly Asp  
 1 5 10 15  
 Arg Leu Tyr Tyr Asp Gly Cys Ala Met Ile Val Ile Asn Gly Asn Ile  
 20 25 30  
 Val Ala Gln Gly Ser Gln Phe Ser Leu Lys Asp Val Glu Val Ile Thr  
 35 40 45  
 Ala Thr Val Asp Ile Glu Glu Val Arg His Pro Val Cys Ser Tyr Thr  
 50 55 60  
 Cys Phe Trp Tyr  
 65

<210> 43452  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 43452  
 Arg Pro Ile Leu Phe Ser His Arg Leu Gln Asn Leu Ser Pro Asp Glu  
 1 5 10 15  
 Ser Leu Val Tyr Asn Val Ile His Ser Thr Gly Arg Asn Gly Ile Trp  
 20 25 30  
 Val Arg Ala Ile Gln Ser Arg Thr Asn Leu His Lys Ser Ile Leu Asp  
 35 40 45  
 Arg Cys Leu Lys Ser Leu Glu Gly Lys Ser Tyr Ile Lys Ser Val His  
 50 55 60  
 Asn Val Lys Phe Pro Ser Arg Lys Met Tyr Met Leu Ala Gly Leu Ala  
 65 70 75 80

## 19611

Pro Ser Glu Ala Gly Leu His His Gly Ala Gly Arg Tyr  
                   85                                  90

<210> 43453

<211> 186

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (15)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43453

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Val | Leu | Pro | Ala | Pro | Trp | Val | Lys | Thr | Ile | Phe | Ile | Xaa | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Glu | Ser | His | Asp | Ser | Gly | Phe | Ser | Asp | Arg | Gly | Pro | Ala | Gln | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Ser | Pro | Asp | His | Thr | Pro | Thr | Gln | Leu | Gln | His | Ser | Pro | Ser | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Arg | Met | Ser | Thr | Leu | Gly | Lys | Ala | Ser | Ser | Ala | Met | Val | Tyr | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Val | Gln | Tyr | Asp | Phe | Gln | Ala | Glu | Arg | Pro | Asp | Glu | Leu | Asp | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Lys | Ala | Gly | Glu | Ala | Ile | Ile | Val | Ile | Ala | Gln | Ser | Asn | Pro | Glu | Trp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe | Val | Ala | Lys | Pro | Ile | Gly | Arg | Leu | Gly | Gly | Pro | Gly | Leu | Ile | Pro |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Val | Ser | Phe | Ile | Glu | Leu | Arg | Asp | Met | Gln | Thr | Gly | Gln | Ala | Val | Ser |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Pro | Leu | Glu | Ala | Val | Lys | Arg | Ala | Gly | Val | Pro | Arg | Val | Glu | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Trp | Lys | Lys | Met | Thr | Ala | Glu | Tyr | Lys | Asn | Ser | Ser | Ile | Thr | Leu | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Lys | Ile | Asp | Ser | Ala | Ala | Ser | Ala | Val | Gln | Ser | Val | Thr | Ser | Gly | Val |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Glu | Lys | Met | Ser | Met | Gly | Arg | Asn | Ser | Ala |     |     |     |     |     |     |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     |     |     |

<210> 43454

<211> 64

<212> PRT

<213> A.fumigatus

<400> 43454

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Gly | Lys | Ser | Tyr | Ser | Trp | Thr | Ser | Ala | Val | Asn | Ile | Leu | Leu | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Phe | Trp | Gln | Ser | Leu | Phe | Asp | His | Lys | Glu | Leu | Ala | Cys | Ala | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Phe | Phe | Thr | Ser | Leu | Arg | Val | Leu | Phe | Leu | Thr | Ala | Leu | Cys | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Ile | Val | Val | Gly | Arg | Leu | Leu | Gly | Glu | Ser | Ser | Cys | Ser | Tyr | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

<210> 43455

<211> 160

19612

<212> PRT

<213> A.fumigatus

<400> 43455

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Gln | Lys | Trp | Gln | Ala | Leu | His | Ser | Gln | Arg | Ser | Pro | Ser | Ser | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | His | Thr | Tyr | Asn | Tyr | Val | Tyr | His | Ala | Ala | Thr | Ala | Ser | Gln | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Ile | Leu | Leu | Leu | His | Gly | Phe | Pro | Ser | Ser | Cys | Tyr | Asp | Trp | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Gln | Ile | His | His | Phe | Ile | Asn | Leu | Arg | Tyr | Gly | Val | Leu | Ala | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Leu | Leu | Gly | Tyr | Gly | Gly | Thr | Ser | Lys | Pro | Thr | Ala | Val | Glu | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Tyr | Lys | Leu | Lys | Ser | Met | Ala | Arg | Glu | Ile | Ile | Glu | Leu | Leu | Glu | His |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Glu | Gly | Leu | Arg | Gln | Ile | His | Ala | Val | Ala | His | Asp | Thr | Gly | Cys | Asn |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Leu | Ser | Arg | Leu | Ala | Asp | Tyr | Pro | Asp | Arg | Leu | Leu | Ser | Cys |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Thr | Phe | Ile | Ala | Val | Pro | Tyr | Ser | Lys | Pro | Gly | Glu | His | Phe | Asp | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Met | Val | Asn | Lys | Phe | Thr | Lys | Gln | Leu | Leu | Gly | Phe | Glu | Lys | Cys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |

<210> 43456

<211> 97

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (61)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43456

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asp | Glu | Ser | Asn | Thr | Gln | Thr | Arg | Asp | Glu | Ile | Val | Asn | Arg | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Arg | Lys | Ala | Trp | Ile | His | Val | Ala | Glu | Leu | Ser | Lys | Arg | Glu | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Lys | Ser | Ile | Ile | Pro | Ala | Val | Thr | Ser | Gln | Gly | Leu | Lys | Pro | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Leu | Phe | Asn | Cys | Ala | Gly | Ile | Gln | Arg | Arg | His | Xaa | Ser | Glu | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe | Pro | Asp | Glu | Asp | Trp | Asp | Glu | Val | Cys | Gln | Ala | Ile | Pro | Trp | Phe |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Ile | Leu | Gln | Lys | Leu | Ile | Ala | Ala | Thr | Asn | Phe | Leu | Arg | Leu | Leu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |

Lys

<210> 43457

<211> 164

<212> PRT

<213> A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (150),(163)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43457

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ile | Glu | Val | Asn | Leu | Thr | Ser | Val | Phe | Thr | Leu | Cys | Arg | Glu | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Ala | Tyr | Leu | Leu | Ala | Arg | Asp | Ala | Ser | Asp | Phe | Pro | Ser | Gly | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Gly | Ser | Ile | Ile | Asn | Val | Ala | Ser | Leu | Leu | Ser | Phe | Gln | Gly | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Thr | Val | Pro | Ala | Tyr | Ala | Ala | Ser | Lys | Gly | Gly | Ile | Ala | Gln | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Lys | Ala | Leu | Ser | Asn | Glu | Trp | Ala | Ser | Lys | Gly | Ile | Asn | Val | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Ile | Ala | Pro | Gly | Tyr | Ile | Asp | Thr | Asp | Met | Asn | Val | Ala | Leu | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Asp | Ala | Asn | Arg | Asn | Ala | Gly | Ile | Met | Ala | Arg | Ile | Pro | Ala | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Trp | Gly | Lys | Pro | Asp | Asp | Phe | Lys | Gly | Val | Ile | Val | Phe | Leu | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser | Glu | Ala | Ser | Asn | Tyr | Val | Ser | Gly | Glu | Val | Val | Ser | Val | Asp | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Trp | Met | Asp | Gln | Xaa | Leu | His | Asp | Arg | Asp | Trp | Leu | Glu | Met | Arg |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Phe | Gly | Xaa | Ala |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43458

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43458

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Asp | Cys | Cys | Thr | Phe | Val | Val | Lys | Thr | Glu | Leu | Gln | Ala | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Cys | Glu | Ser | Cys | Gly | Leu | Thr | Leu | Ser | Thr | Ala | Phe | Ser | Thr | Ala | Trp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Leu | Thr | Leu | Arg | Ser | Phe | Cys | Gly | Ser | Asn | Glu | Val | Cys | Phe | Ser |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Tyr | Met | Ala | Ser | Leu | Arg | Asp | Val | Ser | Val | Asp | Glu | Ile | Gly | Ser | Val |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Val | Gly | Pro | Val | Ile | Asn | Leu | Leu | Ala | Cys | Arg | Met | Lys | Val | Thr | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Val | Cys | Leu | Glu | Asp | Val | Leu | His | Gln | Val | Gln | Asn | Asp | Tyr | Met |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Glu | Ser | Leu | Pro | Tyr | Arg | His | Thr | Ser | Leu | Ile | Asp | Ile | Gln | His | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Lys | Leu | Ser | Asp | Thr | Ile | Leu | Asn | Ser | Gly | Ile | Ser | Tyr | Arg |     |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Lys | Leu | Pro | Pro | Lys | Thr | Leu | Ser | Asn | Arg | Asp | Glu | Met | Arg | Leu | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Glu | Val | Gly | Lys | Ile | His | Asp | Pro | Ala | Glu | Phe | Pro | Val | Tyr | Val | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ile | Glu | Ala | Thr | Asp | Asp | Val | Ala | Tyr | Ile | Asp | Leu | Asn | Tyr | Trp | Thr |

## 19614

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Thr | Ser | Leu | Ser | Glu | Gly | Gln | Ala | Gln | Asn | Val | Ala | Ser | Thr | Phe | Leu |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |  |  |
| Gln | Ser |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 43459  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 43459  
 His Gly Leu Gly Pro Pro Glu Glu Lys Thr Ala Leu Asn Arg Thr Val  
 1 5 10 15  
 Gly Gln Gly Arg Val Ser Lys Thr Gln Leu Ala Thr Ala Val Arg Lys  
 20 25 30  
 His Phe Asn Ser Ala Ala Leu Ala Glu Gln Glu Ala Ile Ala Arg Phe  
 35 40 45  
 Leu Tyr Lys Val Arg Glu Glu Gly Arg Gly Arg Gln Phe Arg Leu Arg  
 50 55 60  
 Phe Gln Pro  
 65

<210> 43460  
 <211> 194  
 <212> PRT  
 <213> A.fumigatus

<400> 43460  
 Ile Pro Leu Gly Glu Asn Ile His Val Lys Ala Asn Ile Thr Val Ser  
 1 5 10 15  
 Asp Gly Thr Tyr Ile Gly Phe Ile Ile Leu Met Phe Ile Gly Ala Leu  
 20 25 30  
 Leu Ala Leu Cys Leu Cys Asn Ala Ser Asp Ile Ile Arg Pro Asp Gly  
 35 40 45  
 Ser Arg Val Ile Leu Met Lys His Pro Ser Trp Gln Ser Glu Leu Leu  
 50 55 60  
 Gly Leu Trp Glu Thr Leu Arg Phe Glu Pro Phe Val Val Leu Leu Phe  
 65 70 75 80  
 Pro Met Phe Phe Ser Ser Asn Trp Phe Tyr Val Tyr Gln Gln Asn Ser  
 85 90 95  
 Val Asn Gly Ala His Phe Gly Thr Arg Thr Lys Ala Leu Asn Ser Leu  
 100 105 110  
 Leu Tyr Phe Leu Ala Gln Ile Leu Ala Ala Val Ile Trp Gly Tyr Leu  
 115 120 125  
 Leu Asp Ile Lys Arg Val Arg Arg Ser Val Arg Ala Lys Ile Thr Trp  
 130 135 140  
 Val Val Leu Phe Val Leu Thr Phe Ala Ile Trp Gly Gly Gly Tyr Ala  
 145 150 155 160  
 Tyr Glu Lys Thr Tyr Thr Arg Glu Ser Val Asn Pro Lys Leu Asn Pro  
 165 170 175  
 Asp Phe Val Pro Thr Asp Trp Val Phe Ala Gly Arg Tyr Glu Glu Arg  
 180 185 190  
 Ser Cys

19615

<210> 43461  
<211> 63  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (61)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43461  
Asp Arg Thr Ser Glu Leu Ala Pro Trp Cys Arg Asp Gly His Glu Asp  
1 5 10 15  
Ser Leu Val Ser Ser Met Thr Val Asn Ala Tyr Asn Met Ala Gly Asp  
20 25 30  
Val Met Lys Glu Tyr Ala Asn Ala Lys Cys Trp Thr Lys Glu Thr Met  
35 40 45  
Pro Ser Thr Asn Ala Ala Ser Thr Arg Arg Ala Pro Xaa Tyr Tyr  
50 55 60

<210> 43462  
<211> 186  
<212> PRT  
<213> A.fumigatus

<400> 43462  
Thr Arg Phe Phe Ile Pro Ala Cys Arg Leu Ile Gly Thr Cys Pro Glu  
1 5 10 15  
Phe Asp Ala Leu Asp Thr Glu Lys Ala Ile Glu Ala Ala Ser Ala Ala  
20 25 30  
Phe Pro Lys Phe Arg Thr Thr Leu Ala Arg Glu Arg Ala Arg Met Leu  
35 40 45  
Arg Arg Trp Tyr Gln Leu Met Met Asp Asn Ala Glu Asp Leu Ala Thr  
50 55 60  
Leu Ile Thr Trp Glu Asn Gly Lys Pro Leu Ala Asp Ala Lys Gly Glu  
65 70 75 80  
Val Asn Tyr Ala Ala Ser Phe Phe Glu Trp Phe Ser Glu Glu Ala Pro  
85 90 95  
Arg Ile Tyr Gly Asp Thr Ile Pro Ala Ser Val Pro Gly Asn Arg Val  
100 105 110  
Met Thr Leu Lys Gln Pro Val Gly Val Cys Gly Leu Ile Thr Pro Trp  
115 120 125  
Asn Phe Pro Ala Ala Met Ile Thr Arg Lys Val Gly Pro Ala Leu Ala  
130 135 140  
Ala Gly Cys Thr Val Val Cys Lys Thr Pro Gly Glu Thr Pro Phe Thr  
145 150 155 160  
Ala Asn Ala Ile Ala Glu Leu Ala His Arg Ala Gly Ile Pro Lys Gly  
165 170 175  
Val Val Asn Met Val Thr Ser Leu Lys Asn  
180 185

<210> 43463  
<211> 76  
<212> PRT  
<213> A.fumigatus

## 19616

&lt;400&gt; 43463

```

Ser His His Val Asp Asn Ser Phe Gly Asn Thr Ser Thr Met Ser Gln
1          5          10          15
Leu Arg Asn Gly Val Arg Cys Glu Arg Cys Phe Ala Arg Ser Leu Ala
          20          25          30
Asp Asn Arg Ala Thr Arg Arg Gln Ser Arg Ser Asn Leu Ser Cys Asp
          35          40          45
His Ser Ser Gly Glu Ile Pro Arg Arg Tyr Gln Ala Ala Asp Ala Asn
          50          55          60
Gly Leu Leu Gln Arg His Asp Ser Val Ala Gly Asn
65          70          75

```

&lt;210&gt; 43464

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (25), (60), (172)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43464

```

Asp Ser Asn Leu Gly His Arg His Gly Val Arg Arg Val Gly Asp Gly
1          5          10          15
Gly Ala Gly Gly Gly Gly Gly Gly Xaa Ser Gly Ser Asp Gly Arg Thr
          20          25          30
Thr Gly Gln Arg Gly Ser Gly Ser Gly Ser Thr Gly Arg Ser Gly Asp
          35          40          45
Cys Ile Asp Ala Gly Gly Gly Asp Gly Gly Asp Xaa Gly Asp Gly Gly
          50          55          60
Arg Asp Ala Gly His Asp Ala Gly Val Leu Gly Tyr Val Gly Ser Ala
65          70          75          80
Asp Thr Ser Glu Val Gly Gln Ser Gly Leu Asp Leu Arg Leu Arg Gly
          85          90          95
Ser Pro Gly Leu His Thr Ser Asp Asp Leu Val Ser Glu Leu Gly Gly
          100          105          110
Trp Ala Glu Ala Ala Gly Val Thr Val Gly Val Ala Leu Gly Glu Gln
          115          120          125
Ala Glu Pro Gly Val Asp Thr Leu Gly His Asn Val Gly Ala Arg Gly
          130          135          140
Arg Arg Asp Arg Arg Arg Ser Gly Gly His Gly Trp His Val Ala Gly
145          150          155          160
Leu Ala Gly Gly Asp Arg Gly Leu Ala Cys Gly Xaa
          165          170

```

&lt;210&gt; 43465

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (113), (148)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.



19617

<400> 43465

```

Xaa Pro Thr Gly Gln Ser Pro Val Thr Ala Ser Glu Thr Ser Asp Val
1          5          10          15
Pro Ser Val Thr Thr Thr Pro Ser Ser Val Pro Ser Ala Pro Cys Pro
          20          25          30
Asn Val Val Pro Lys Cys Ile Asn Thr Trp Leu Ser Leu Leu Pro Lys
          35          40          45
Cys Asp Ser Asn Ser Asp Ala Ser Cys Phe Cys Pro Ser Ser Glu Phe
          50          55          60
Thr Asp Lys Val Ile Ala Cys Val Gln Ser Trp Gly Ala Ser Gln Ala
65          70          75          80
Glu Val Gln Ala Ala Leu Ser Tyr Phe Thr Gly Ile Cys Ala Ala Tyr
          85          90          95
Val Pro Gln Asn Pro Gly Ile Val Thr Gly Ile Pro Thr Thr Ile Thr
          100          105          110
Xaa Val Pro Thr Val Thr Pro Thr Gly Val Asp Ala Val Thr Ala Pro
          115          120          125
Thr Gly Ala Ala Thr Ala Thr Ala Thr Leu Thr Gly Gly Ala Ala Val
          130          135          140
Thr Pro Ala Xaa Ser Ala Pro Ser Ala Pro Cys Thr Thr Ile Thr Tyr
145          150          155          160
Ser Ser Tyr Thr Val Thr Val Pro Gln Val Ala Val Leu His Arg Arg
          165          170          175
Gly Cys Gln Asp Thr Arg Leu Met Gly Lys
          180          185

```

<210> 43466

<211> 120

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (47), (83)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43466

```

Gln Gly His Arg Leu Cys Ala Val Leu Gly Ser Leu Ala Gly Gly Gly
1          5          10          15
Pro Gly Arg Ser Val Leu Leu His Trp Tyr Leu Arg Cys Leu Arg Thr
          20          25          30
Pro Glu Pro Arg His Arg Asp Arg His Pro Asp His His His Xaa Gly
          35          40          45
Pro His Arg His Pro His Arg Arg Arg Cys Ser His Arg Ser Tyr Arg
          50          55          60
Cys Cys His Cys His Cys His Ala Asp Arg Trp Cys Gly Arg His Ser
65          70          75          80
Arg Ser Xaa Arg Pro Leu Arg Pro Leu His His His His Leu Leu Val
          85          90          95
Leu His Arg Asp Gly Ala Pro Gly Cys Cys Leu Thr Pro Thr Gly Leu
          100          105          110
Pro Gly His Ala Leu Asn Gly Glu
          115          120

```

<210> 43467

<211> 173

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43467

```

Tyr Gly Glu Ile Val Asp Ile Arg Phe Pro Ser Leu Lys Tyr Asn Thr
1           5           10           15
His Arg Arg Phe Cys Tyr Val Gln Phe Lys Ser Ser Gly Asp Ala His
          20           25           30
Asn Ala Thr Arg Leu Asn Gly Thr Arg Val Gly Ser Asp Leu Ser Leu
          35           40           45
Val Val Lys Ile Ser Asp Pro Thr Arg Arg Glu Asp Arg His Gly Pro
          50           55           60
Val Tyr Glu Gly Arg Glu Ile His Ile Ser Asn Ile Asp Trp Lys Ala
65           70           75           80
Asn Glu Asp Asp Leu Lys Glu Val Phe Gln Lys Tyr Gly Thr Ile Glu
          85           90           95
Thr Val Arg Ile Pro Arg Lys Val Asp Gly Gly Ser Lys Gly Phe Gly
          100          105          110
Tyr Ile Val Phe Ser Thr Lys Val Cys Leu Val Ala Ile Arg Leu Leu
          115          120          125
Ser Phe Met Thr Asp Leu Ser His Arg Arg Arg Gln Lys Pro Pro Leu
          130          135          140
Leu Cys Met Asn Arg Asn Ser Ala Arg Gly Arg Tyr Arg Tyr Glu Ser
145          150          155          160
Arg Pro Pro Lys Val Pro Asn Glu Leu Gln Pro Leu Ser
          165          170

```

&lt;210&gt; 43468

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18), (249)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43468

```

Ala Ile Arg Ser Glu Ile Leu Ser Ser Pro Gly Arg Val Arg Leu Leu
1           5           10           15
Ala Xaa Arg Arg Lys Ser Glu Pro Pro Thr His His Lys Leu Asn Glu
          20           25           30
Glu Ala Leu Asn Thr Trp Val Tyr Pro Thr Asn Leu Gly Lys Thr Arg
          35           40           45
Asp Tyr Gln Phe Asn Ile Ala Gln Arg Gly Leu Phe His Asn Leu Leu
          50           55           60
Val Ala Leu Pro Thr Gly Leu Gly Lys Thr Phe Ile Ala Ala Thr Ile
65           70           75           80
Met Leu Asn Trp Tyr Arg Trp Thr Lys Ser Ala Gln Ile Ile Phe Val
          85           90           95
Ala Pro Thr Lys Pro Leu Val Ala Gln Gln Ile Ser Ala Cys Phe Gln
          100          105          110
Val Ala Gly Ile Pro Arg Ser Glu Thr Thr Met Leu Thr Gly Glu Ala
          115          120          125
Ala Pro Gly Ile Arg Ala Glu Glu Trp Lys Ser Lys Arg Val Phe Phe
          130          135          140

```

## 19619

Met Thr Pro Gln Thr Leu Val Asn Asp Leu Lys Ser Gly Ile Ala Asp  
 145 150 155 160  
 Pro Lys Arg Ile Val Leu Leu Val Val Asp Glu Ala His Arg Ala Thr  
 165 170 175  
 Gly Gly Tyr Ala Tyr Val Glu Val Val Lys Phe Leu Lys Arg Tyr Tyr  
 180 185 190  
 Lys Ser Phe Arg Val Leu Ala Leu Thr Ala Thr Pro Gly Ser Thr Val  
 195 200 205  
 Glu Ser Val Gln Ala Ile Ile Asp Asp Leu Gly Ile Ala Lys Val Glu  
 210 215 220  
 Ile Arg His Glu Gln Ser Leu Asp Ile Arg Glu Tyr Val His Ala Pro  
 225 230 235 240  
 Glu His Arg Ser Ala Asn Val Pro Xaa Ile Pro Thr Lys Met Val Leu  
 245 250 255  
 Cys Met Gly Thr Phe Gln Gln Gly Pro Cys Pro Pro Leu Val Arg Thr  
 260 265 270  
 Thr Ser Arg Asn Leu Lys Arg  
 275

&lt;210&gt; 43469

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43469

Ile Tyr Ala Leu Leu Ala Leu Cys Cys Gly Val Ser Ser Ser Leu Glu  
 1 5 10 15  
 Phe Ser Pro Leu Cys Leu Leu Pro Val Pro Leu Thr Gln Tyr Gln Gly  
 20 25 30  
 Leu Ala Val Phe Phe Leu Ile Ser Arg Ser Ser Ile Pro Ile Pro Glu  
 35 40 45  
 Asn Ile Gly Ser Lys Leu Ser Pro Ala Asn Tyr Lys Asp Thr Ile Ser  
 50 55 60  
 Gln Ser Asp Lys Ala His Asn Asp Ala Pro Pro Lys Pro Pro Val Lys  
 65 70 75 80  
 Glu Thr Pro Gly Ser Ala Asn Thr Ala Pro Val Gly Arg Val Asn Ala  
 85 90 95  
 Thr Phe Val Thr Leu Ala Arg Asn Ser Asp Val Trp Asp Ile Ala Lys  
 100 105 110  
 Ser Ile Arg Gln Val Glu Asp Arg Phe Asn Arg Asn Tyr His Tyr Asp  
 115 120 125  
 Trp Val Phe Leu Asn Asp Lys Pro Phe Asp Asp Thr Phe Lys Lys Val  
 130 135 140  
 Thr Thr Ser Leu Val Ser Gly Lys Thr Phe Tyr Gly Glu Ile Pro Lys  
 145 150 155 160  
 Glu His Trp Ser Tyr Pro Asp Trp Ile Asp Gln Glu Lys Gly Leu His  
 165 170 175  
 His Gly Ala Gly Arg Asn Arg Ala  
 180

&lt;210&gt; 43470

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43470

## 19620

Tyr Gly Leu Phe Gly Val Thr Trp Ala Ile Ala Gly Ala Leu Gly Pro  
 1 5 10 15  
 Ile Ile Gly Gly Ala Phe Thr Thr Ala Val Thr Trp Arg Trp Cys Phe  
 20 25 30  
 Tyr Leu Asn Cys Thr Tyr Asn Leu Val Asp Leu Trp Arg Asn Gln Ala  
 35 40 45  
 Asp Leu Leu Ser Thr Cys Arg Trp Arg Leu Val Arg Asn Pro Arg Leu  
 50 55 60  
 Leu Pro Gln Ala Arg Ile Arg Trp His Ala Ala Val Arg Arg Pro Pro  
 65 70 75 80  
 Ser Tyr Arg Leu Val Arg His Cys Ser His His Arg Arg His Thr His  
 85 90 95  
 Val Pro Leu Arg Ala Gly Val Arg Arg Tyr Gln Leu Pro Leu Gly Leu  
 100 105 110  
 Gly His Ser His Leu Pro Asp His Leu Arg Arg Ser Gly Leu Gly Pro  
 115 120 125  
 Ser Asp Ala Glu Arg Val Glu Thr Arg Gln Val Ser Ser Asp Ser Arg  
 130 135 140  
 Ala Thr Phe Gln Lys Leu Ala Gln Ser Ser Arg Pro Tyr Arg Leu Leu  
 145 150 155 160  
 Pro Pro Gly Leu Val Phe Thr Ile Gly Gly Trp Thr Asp Gln Arg Leu  
 165 170 175

Lys

<210> 43471  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<400> 43471  
 Thr Val Arg Ile Ile Ser Leu Thr Cys Gly Gly Ile Lys Leu Ile Cys  
 1 5 10 15  
 Ser Val Pro Val Gly Gly Val Ser Phe Ala Ile Leu Val Phe Phe Leu  
 20 25 30  
 Lys Leu Glu Ser Gly Gly Thr Pro Leu Phe Glu Gly Leu Arg Ala Ile  
 35 40 45  
 Asp Trp Ser Gly Thr Val Leu Ile Ile Gly Gly Thr Leu Met Phe Leu  
 50 55 60  
 Phe Gly Leu Glu Phe Gly Gly Ile Asn Tyr Pro Trp Ala Ser Ala Thr  
 65 70 75 80  
 Val Ile Cys Leu Ile Ile Phe Gly Val Val Val Trp Val Leu Ala Met  
 85 90 95  
 Leu Asn Glu Trp Lys Leu Ala Lys Tyr Pro Leu Ile Pro Val Arg Leu  
 100 105 110  
 Phe Lys Asn Trp His Asn Arg Leu Val Leu Ile Val Cys Phe Arg Gln  
 115 120 125  
 Ala Leu Phe Ser Pro Ser Ala Asp Gly Pro Ile Asn Asp  
 130 135 140

<210> 43472  
 <211> 247  
 <212> PRT  
 <213> A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (32), (52), (68)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43472

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Val | Leu | Leu | Gln | Val | Ser | Val | Arg | Ile | Gly | Pro | Asn | His | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Pro | Phe | Leu | Ser | Ser | Gln | Gln | Asn | Phe | Ser | Met | Ser | Ser | Pro | Xaa |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Leu | Thr | Glu | Lys | Ala | Arg | Ser | Val | Phe | Glu | Ala | Ala | Lys | Phe | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Cys | Gln | Xaa | Gly | Gln | Thr | Cys | Pro | Ala | Ile | Gln | Pro | Asn | Arg | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Pro | Arg | Xaa | Tyr | Gly | Gln | Phe | Asn | Ile | Lys | Gln | Lys | Gly | Asp | Pro |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Arg | Lys | Trp | Phe | Arg | Val | Glu | Leu | His | Arg | Lys | Ser | Glu | Leu | Phe | Trp |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Ala | Pro | Asn | Ile | Pro | Ala | Cys | Thr | Pro | Asp | Ala | Glu | Asp | Pro | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Tyr | Met | Leu | Ala | Lys | Asp | Ala | Arg | Leu | Pro | Glu | Asn | Ser | Pro | Arg | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Leu | Asp | Arg | Met | Asn | Pro | Thr | Asp | Tyr | Pro | Val | Lys | Ile | Pro | Thr |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Asn | Leu | Tyr | Ala | Glu | Ala | Leu | Ala | Met | Leu | Tyr | Tyr | Arg | Asp | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Val | Pro | Gly | Pro | Thr | Ile | Arg | Gly | Asp | Tyr | Trp | Leu | Asp | Leu | Gln | Ser |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Glu | Leu | Val | Gln | Thr | Gly | Leu | Val | Thr | Leu | Asp | Glu | Leu | Pro | Ala | Arg |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Lys | Arg | His | Tyr | Glu | Leu | Val | Arg | Asp | Ala | Asp | Met | Lys | Glu | Val |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| His | Arg | Tyr | Ser | Glu | Glu | Val | Ala | Gly | Gln | Met | Arg | Glu | Arg | Phe | Glu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Val | Pro | Val | Arg | Met | Leu | Pro | Leu | Asp | Arg | Asp | Val | Phe | Glu | Pro | Gly |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Ala | Ala | Ala | Glu | Glu | Phe | Leu |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 245 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43473

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43473

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Cys | Phe | Phe | Cys | Gln | Tyr | Ser | Ser | Leu | Thr | Leu | Ala | Met | Ser | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Lys | Gln | Pro | Val | Gly | Val | Gln | Thr | Ser | Ser | Ala | Val | Pro | Asp | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Thr | Ser | Pro | Tyr | Phe | Glu | Pro | Pro | Lys | Tyr | Asn | Asp | Pro | Val | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Val | Asn | Lys | Asn | Thr | Gly | Glu | Asp | Asp | Ser | Gly | Ser | Glu | Ala | Val | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Asp | Arg | Ile | Asp | Thr | Gln | Lys | Lys | Gly | Phe | Trp | Ala | Tyr | Leu | Ser | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Thr | Thr | Gly | Gly | Arg | Arg | His | Arg | Ala | Lys | Ser | Ile |     |     |     |     |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     |     |

<210> 43474  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43474

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Leu | His | Val | Xaa | His | Leu | Pro | Ser | Thr | Cys | Leu | Ser | Pro | Thr | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ser | Arg | Arg | Tyr | Glu | Leu | Ala | Ala | Gly | Val | Phe | Leu | His | Asn | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Ser | Leu | Thr | Leu | Val | Leu | Gln | Leu | Gln | Glu | Ile | Glu | Ala | Arg |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Ile | Ser | Ser | Gln | Gln | Gln | Ile | Gly | Val | Thr | Lys | Ala | Gln | Ile | Thr |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Lys | Gln | Lys | Asn | Val | Arg | Leu | Leu | Glu | Leu | Thr | Ser | Lys | Glu | Ile |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Gly | Ser | Leu | Ser | Lys | Asp | Thr | Lys | Val | Tyr | Glu | Gly | Val | Gly | Lys | Met |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

<210> 43475  
 <211> 323  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (34), (313), (314), (315), (316), (317), (318), (319), (320), (321)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43475

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Glu | Leu | Pro | Pro | Tyr | Phe | Trp | Lys | Pro | Ser | Trp | Pro | Phe | Ser | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Phe | Thr | Tyr | Lys | Asp | Arg | Ala | Phe | Arg | Lys | Pro | Lys | Arg | Ser | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Xaa | Gln | Asp | Pro | Ser | Pro | Asp | Ala | Ser | Glu | Ile | Glu | Ala | Glu | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | His | Ala | Ala | Gly | Ser | Leu | Glu | Gln | Pro | Leu | Gly | Val | Tyr | Lys | Leu |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Ser | Met | Leu | Asp | Ser | Met | Phe | Asn | Ser | Ile | Gly | Ser | Thr | Cys | Ala |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Arg | Phe | Gln | Ala | Ile | Thr | Ile | Val | Thr | Ser | Ile | Leu | Leu | Val | Gly | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Ser | Leu | Gly | Trp | Leu | Arg | Phe | Ala | Val | Glu | Thr | Asp | Pro | Val | Arg |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Trp | Val | Ser | Pro | Thr | Ser | Pro | Ala | Ala | Gln | Glu | Lys | Glu | Tyr | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Ala | Asn | Phe | Gly | Pro | Phe | Tyr | Arg | Ala | Glu | Gln | Val | Phe | Val | Val |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Glu | His | Gly | Pro | Val | Leu | Thr | Tyr | Asp | Thr | Leu | Ser | Trp | Trp | Phe |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |

## 19623

```

Asp Val Glu Ser Gln Ile Arg Arg Met Ile Ser Pro Gly Arg Gly Leu
      165                      170                      175
Leu Leu Asp Asp Val Cys Phe Lys Pro Thr Gly Asp Ala Cys Val Val
      180                      185                      190
Gln Ser Leu Thr Gly Tyr Phe Gly Gly Ser Gly Trp Asn Leu His Pro
      195                      200                      205
Asp Thr Trp Glu Glu Arg Ile Lys His Cys Ala Asn Ser Pro Gly Asp
      210                      215                      220
Pro Ser Cys Leu Pro Asp Phe Gln Gln Pro Leu Lys Pro Glu Met Ile
      225                      230                      235                      240
Leu Gly Gly Tyr Glu Lys Ser Gly Asn Val Leu His Ala Gln Ala Leu
      245                      250                      255
Ile Thr Thr Trp Val Leu Asn Asn His Ala Gln Gly Thr Glu Gly Glu
      260                      265                      270
Ala Asp Ala Ile Asp Trp Glu Asn Asn Leu Lys Gln Leu Leu Tyr Asn
      275                      280                      285
Val Gln Glu Asp Ala Lys Glu Arg Gly Leu Arg Val Ser Phe Ile Thr
      290                      295                      300
Glu Val Ser Leu Glu Gln Gly Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      305                      310                      315                      320
Xaa Gly Thr

```

&lt;210&gt; 43476

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (21), (56), (101), (148), (277), (279)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43476

```

Gly Lys Gly Thr Leu Val Gly Arg Pro Gly Thr Leu Lys Leu Lys Ser
1      5      10      15
Ile Pro Ile Leu Xaa Asp Leu Arg Cys Gly Gly Gly Ser Ile Ser Arg
      20      25      30
Pro Lys Phe Val Leu Glu Arg Gly Leu Ile Ser Gly Arg Ala Asp Thr
      35      40      45
Lys Glu Arg Pro Phe Lys Cys Xaa Lys Cys Arg Arg Thr Phe Val Arg
      50      55      60
Arg Asp Leu Leu Phe Arg His Asp Arg Thr Val His Ala Lys Asp Gly
      65      70      75      80
Gly Ile Pro Leu Val Ala Glu Gly Arg Arg Arg Gly Gly Ala Gly Val
      85      90      95
Gln Lys Ser Ser Xaa Ala Pro Ala Pro Ser Lys Pro Ser Ile Thr Ile
      100     105     110
Asp Pro Thr Thr Leu Glu Gln Leu Glu Ala Ser Ser Asp Gly Met Val
      115     120     125
Asp Leu Glu Ala Ala Ala Met Leu Met Thr Asp Phe Gln His Lys Ala
      130     135     140
Ala Ala Ala Xaa Thr Gly Gln Val His Asp Arg Ala Glu Ser Asp Arg
      145     150     155     160
Ser Phe Ser Pro Gly Arg Gly Ser Leu Met Glu Pro Ser Ser Ala Tyr
      165     170     175

```

## 19624

Leu Ser Gly Asn Ala Thr Leu Pro Gln Met Pro Trp Asp Thr Leu Val  
                   180                  185                  190  
 Ser Pro Ala Asp Met Lys His His Met Met Asn Pro Thr Phe Val Ser  
                   195                  200                  205  
 Gln Gly Asn Ala Ser Asp Leu Arg Gln Leu Pro Asn Val Leu Asp Arg  
                   210                  215                  220  
 Gly Asp Thr Leu Ala Pro Ser Leu His Ser Leu Val Ser Ser Leu Pro  
 225                  230                  235                  240  
 Met Ser Gly Asn Ser Thr Pro Asn Ala Leu Ser Pro Phe Pro Ser Met  
                   245                  250                  255  
 Thr Gly Pro Val Ser Pro Val Asn Val Phe Thr Thr Gly Leu Glu Gly  
                   260                  265                  270  
 Asn Ala Leu Pro Xaa Gly Xaa  
                   275

&lt;210&gt; 43477

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (53), (98)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43477

Leu Thr Thr Thr Phe Thr Ala Pro Ala Ser Cys Val Thr Ala Thr Gly  
 1                  5                  10                  15  
 Asn Tyr Leu Ile Gly Leu Asn Thr Thr Val Pro Val Trp Glu Tyr Ala  
                   20                  25                  30  
 Val Gln Cys Ser Thr Leu Gly Tyr Thr Gly Cys Ile Pro Thr Gly Thr  
                   35                  40                  45  
 Ala Ser Leu Pro Xaa Thr Leu Asn Asp Asn Pro Asn Thr Ile Ala Thr  
                   50                  55                  60  
 Gln Val Tyr Phe Ser Pro Gly Leu Tyr Cys Pro Ala Gly Trp Ala Thr  
 65                  70                  75                  80  
 Arg Gly Val Ala Val Arg Asp Ala Asn Asn Gly Leu Ser Ala Ser Gly  
                   85                  90                  95  
 Ile Xaa Ser Ala Arg Pro Thr Pro Thr Pro Thr Val Ser Ile Pro Thr  
                   100                  105                  110  
 Ala Ala Pro Gln Trp Glu Asn Pro Ala Thr Leu Leu Met Gly Leu Leu  
                   115                  120                  125  
 Asp Pro Ser Glu Thr Leu Val Met Cys Cys Pro Glu  
                   130                  135                  140

&lt;210&gt; 43478

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43478

Gln Pro Asn His Phe Thr Asp Asp Asp Asp Asp His Asp Asn Leu  
 1                  5                  10                  15  
 Glu Pro Ile Ser Glu Ala Asn Ile Ile Ser Gly Gly Arg Arg Thr Arg  
                   20                  25                  30  
 Gly Lys Thr Ile Asp Phe Gln Glu Ala Ala Glu Lys Leu Lys Ala Glu



| Variable            | Mean | SD   | Min  | Max  | Skewness | Kurtosis | Normality |
|---------------------|------|------|------|------|----------|----------|-----------|
| Age                 | 35.2 | 12.5 | 18   | 65   | 0.15     | 3.2      | 0.98      |
| Gender              | 1.2  | 0.4  | 1    | 2    | 0.05     | 3.0      | 0.99      |
| Education           | 12.5 | 2.1  | 9    | 16   | 0.25     | 3.5      | 0.97      |
| Income              | 4500 | 1500 | 2000 | 8000 | 0.35     | 3.8      | 0.96      |
| Marital Status      | 1.5  | 0.5  | 1    | 2    | 0.10     | 3.1      | 0.98      |
| Religion            | 1.8  | 0.6  | 1    | 3    | 0.20     | 3.4      | 0.97      |
| Occupation          | 2.5  | 0.8  | 1    | 4    | 0.15     | 3.2      | 0.98      |
| Health Status       | 1.2  | 0.4  | 1    | 2    | 0.05     | 3.0      | 0.99      |
| Stress Level        | 3.5  | 1.2  | 1    | 5    | 0.30     | 3.7      | 0.96      |
| Life Satisfaction   | 4.2  | 0.8  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Resilience          | 3.8  | 1.0  | 2    | 5    | 0.25     | 3.6      | 0.97      |
| Emotional Stability | 4.5  | 0.7  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Social Support      | 3.2  | 0.9  | 2    | 4    | 0.15     | 3.2      | 0.98      |
| Life Events         | 2.8  | 0.7  | 1    | 4    | 0.20     | 3.4      | 0.97      |
| Personal Growth     | 4.0  | 0.8  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Self-Esteem         | 4.3  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Optimism            | 4.1  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Gratitude           | 4.4  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Forgiveness         | 4.2  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Resilience          | 3.9  | 0.8  | 2    | 5    | 0.15     | 3.3      | 0.97      |
| Emotional Stability | 4.6  | 0.5  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Social Support      | 3.4  | 0.8  | 2    | 4    | 0.15     | 3.2      | 0.98      |
| Life Events         | 2.9  | 0.7  | 1    | 4    | 0.20     | 3.4      | 0.97      |
| Personal Growth     | 4.1  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Self-Esteem         | 4.4  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Optimism            | 4.2  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Gratitude           | 4.5  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Forgiveness         | 4.3  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Resilience          | 4.0  | 0.8  | 2    | 5    | 0.15     | 3.3      | 0.97      |
| Emotional Stability | 4.7  | 0.5  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Social Support      | 3.6  | 0.7  | 2    | 4    | 0.15     | 3.2      | 0.98      |
| Life Events         | 3.0  | 0.6  | 1    | 4    | 0.20     | 3.4      | 0.97      |
| Personal Growth     | 4.2  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Self-Esteem         | 4.5  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Optimism            | 4.3  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Gratitude           | 4.6  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Forgiveness         | 4.4  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Resilience          | 4.1  | 0.8  | 2    | 5    | 0.15     | 3.3      | 0.97      |
| Emotional Stability | 4.8  | 0.5  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Social Support      | 3.8  | 0.6  | 2    | 4    | 0.15     | 3.2      | 0.98      |
| Life Events         | 3.1  | 0.5  | 1    | 4    | 0.20     | 3.4      | 0.97      |
| Personal Growth     | 4.3  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Self-Esteem         | 4.6  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Optimism            | 4.4  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Gratitude           | 4.7  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Forgiveness         | 4.5  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Resilience          | 4.2  | 0.8  | 2    | 5    | 0.15     | 3.3      | 0.97      |
| Emotional Stability | 4.9  | 0.5  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Social Support      | 4.0  | 0.6  | 2    | 4    | 0.15     | 3.2      | 0.98      |
| Life Events         | 3.2  | 0.5  | 1    | 4    | 0.20     | 3.4      | 0.97      |
| Personal Growth     | 4.4  | 0.7  | 3    | 5    | 0.10     | 3.1      | 0.98      |
| Self-Esteem         | 4.7  | 0.6  | 3    | 5    | 0.05     | 3.0      | 0.99      |
| Optimism            | 4.5  | 0.   |      |      |          |          |           |

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<210> 43479
<211> 161
<212> PRT
<213> A.fumigatus
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<220>
<221> UNSURE
<222> (136),(139)
<223> Identity of amino acid sequences at the above locations are unknown.
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<210> 43480
<211> 80
<212> PRT
<213> A.fumigatus
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<220>
<221> UNSURE
<222> (19),(22)
<223> Identity of amino acid sequences at the above locations are unknown.
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<400> 43480  
Glu Pro Pro Gly Pro Pro Arg Lys Ser Gln Pro Ile Ser Pro Pro Pro  
1 5 10 15  
Pro Pro Xaa Phe Leu Xaa Phe Phe Ile Pro Leu Tyr Pro Phe Pro Pro  
20 25 30  
Tyr Pro Phe Ser Phe Phe Phe Asp Ser Ser His Leu Leu Gly Ser Thr

## 19626

35 40 45  
 Tyr Pro Ile Ser Leu Leu Ser Pro Ala Thr Leu Ser Phe Ser Pro Leu  
 50 55 60  
 Ser Leu Leu Phe Ser Leu Phe Pro Ser Leu Pro Ser Arg Arg Ser Pro  
 65 70 75 80

<210> 43481  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 43481  
 Arg Arg Ser Lys Arg Arg Ala Ala Thr Arg Glu Met Leu Glu Ser Asp  
 1 5 10 15  
 Leu Tyr Ala Gln Gln Ala Thr Tyr Asn Ala Asn Gly Glu Ser Arg Ile  
 20 25 30  
 Arg Trp Thr Pro Thr Thr Leu Arg Ser Asp Pro Leu Ala Cys Ser Leu  
 35 40 45  
 Arg Phe Ala Ala Ala Ile Lys Leu Ser Ala Arg Arg Ser  
 50 55 60

<210> 43482  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 43482  
 Leu Cys Cys Cys Pro Tyr Gln Pro Asp Met Gly Tyr Pro Arg His Arg  
 1 5 10 15  
 Met Phe Pro Leu Thr Arg Glu Asn Ala Val Ser Asn Val Asp Val Gln  
 20 25 30  
 Gly Asn Phe Leu Thr Trp His Arg Tyr Phe Thr Trp Ala Tyr Glu Gln  
 35 40 45  
 Ala Leu Arg Asn Glu Cys Gly Tyr Thr Gly Tyr Gln Pro Tyr Trp Ala  
 50 55 60  
 Trp Asn Lys Tyr Ala Asp Asp Pro Arg Asn Ser Pro Ile Phe Asp Gly  
 65 70 75 80  
 Ser Asp Tyr Ser Met Ser Gly Asp Gly Ser Tyr Ile Pro His Asp Gly  
 85 90 95  
 Ser Glu Ala Ala Pro Gly Ile Val Leu Thr Pro Gly Asn Gly Gly Gly  
 100 105 110  
 Cys Val Phe Ser Gly Pro Phe Lys Lys  
 115 120

<210> 43483  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 43483  
 Arg Trp Met Cys Arg Gly Ser Leu Ser Lys Arg Glu Arg Lys Glu Tyr  
 1 5 10 15  
 Thr Asp Ala Val Leu Cys Leu Ala Ser Lys Pro Ser Lys Leu Asp Pro  
 20 25 30  
 Ala Phe Ala Pro Gly Ala Arg Ser Arg Tyr Asp Asp Phe Val Ala Val  
 35 40 45

## 19627

His Ile Asn Gln Thr Trp Val Ile His Gly Thr Val Cys Phe His  
 50 55 60

<210> 43484

<211> 300

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (93), (290), (297), (298)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43484

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asp | Arg | Asn | Asn | Pro | Gln | Arg | Glu | Leu | Phe | Gln | Thr | Val | Ser | Leu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Arg | Thr | Trp | Ile | Arg | Ile | Ser | Gly | Leu | Met | Val | Asn | His | Gly | Phe | Arg |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Thr | Gly | Ala | Glu | Ala | Leu | Asn | Ile | His | Tyr | Asn | Leu | Trp | Gly | Phe | Phe |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Gly | Asp | Arg | Phe | Leu | Thr | Ser | Asn | Val | Asp | Val | Glu | Glu | Asp | Lys | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Lys | Ser | Ile | Gly | Asn | Arg | Tyr | Arg | Ala | Phe | Gln | Thr | Arg | Asn | Gly |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Arg | Ile | Val | Ala | Phe | Gly | Val | Thr | Val | Asn | Asp | Xaa | Ile | Leu | Arg |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Asp | Leu | Asn | His | Thr | Glu | Val | His | Asn | Ala | Ser | Trp | Ile | Phe | Glu | Gln |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Trp | Phe | Ala | Glu | Ala | Met | Lys | Lys | Glu | Ala | Asp | Ile | Tyr | Val | Ile |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Val | Gly | His | Ile | Pro | Thr | Tyr | Ala | Ser | Cys | Leu | Asp | Pro | Thr | Lys | Asp |
|     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Asn | Pro | Met | Val | Cys | Leu | Arg | Asp | Arg | Ile | Arg | Asn | Ser | Thr | Asp | Lys |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     | 160 |
| Pro | Ile | Gln | Leu | Phe | Gly | Gly | His | Ala | His | His | Arg | Asn | Phe | Thr | Cys |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Tyr | Asp | Asp | Arg | Ser | Ser | Gly | Ile | Asp | Ser | Gly | Lys | Tyr | Cys | Asp | Thr |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Val | Gly | Trp | Val | Ala | Leu | Asn | Asn | Val | Leu | Ser | Pro | Thr | Trp | Ser | Gly |
|     |     | 195 |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Thr | Lys | Glu | Leu | Leu | Gly | Asp | Asp | Leu | His | Pro | Asn | Lys | Ser | Cys | Ala |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |
| Val | Gly | Arg | Gln | Gly | Asp | Thr | His | Asp | Ala | Pro | Tyr | Leu | Leu | Asp | Arg |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Arg | Tyr | Leu | Asp | Trp | Asn | Arg | Val | Thr | Phe | Ala | Tyr | His | Thr | Val | Asn |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Leu | Glu | Gly | Asn | Thr | Asp | Asn | Pro | Ser | Val | Pro | Ala | Ser | Phe | Asp | Met |
|     |     | 260 |     |     |     | 265 |     |     |     |     |     |     | 270 |     |     |
| Pro | Leu | Gly | Arg | Lys | Val | Thr | Asp | Ala | Ile | Ser | Lys | Ala | Arg | Ser | Thr |
|     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |
| Arg | Xaa | Gly | Trp | Lys | Val | Pro | Arg | Xaa | Xaa | Lys | Ile |     |     |     |     |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |

<210> 43485

<211> 207

<212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43485

```

Met Ala Val Arg Pro Gly Val Leu Ser Ile Pro Leu Glu Thr Trp Gly
1          5          10          15
Pro Ala Asp Tyr Phe Ser Gly Asn Ser Lys Glu Pro Gln Arg Asp Ala
          20          25          30
Glu Lys Leu Pro Pro Leu Pro Arg Asp Thr Ile Gly Cys Ala Ala Pro
          35          40          45
Asp Asp Thr Gly Ile Trp Ser Met Thr Val His Phe Gly Trp Val Trp
          50          55          60
Ser Lys Val Arg Thr Tyr Val Ser Asp Cys Ala Asn Asn Arg Val Arg
65          70          75          80
Glu Pro Trp Arg His Glu Ser Met Tyr Ser Met Val Leu Ser Asp Leu
          85          90          95
Thr Glu Ile Glu Asn Gln Thr Pro Leu Cys His Arg Tyr Asp His Val
          100          105          110
Arg Phe Tyr Asp Arg Gln Pro Asp Glu Leu Ile Val Asn Arg Ala Tyr
          115          120          125
Trp Ile Pro Trp Leu Lys Leu Gln Phe Met Tyr His Ala Ile Leu Thr
          130          135          140
Val Leu Asn His Pro Phe Leu Tyr Ile Met Ala Ser Arg His Asn Pro
145          150          155          160
Asn Leu Ala Ile Pro Asn Ser Phe Trp Arg Arg Ser Ser Glu Leu Val
          165          170          175
Leu Leu His Ala Thr Trp Ile Val Arg Met Ile Asp Met Leu Ser Asp
          180          185          190
Lys Asp Gly Phe His His Gly Gly Arg Pro Ser Ala Leu Ser Lys
          195          200          205

```

&lt;210&gt; 43486

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (85), (86), (87), (88), (89), (90), (91), (92), (93)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43486

```

Ser Pro Thr Gly Ala Ser Thr Arg Ser Pro Phe Pro Met Ser Leu Pro
1          5          10          15
Ala Ser Thr Cys Ser Val Leu Arg Ser Ser Pro Cys Thr Arg Val Thr
          20          25          30
Ala Arg Val Ala Pro Asn Ser Thr Trp Ser Val Ser Arg Ser Arg Ser
          35          40          45
Pro Leu Pro Ala Pro Arg Pro Ser Leu Pro Val Phe Pro Phe Pro Val
          50          55          60
Pro Thr Arg Pro Pro Thr Gln Val Phe Ser Ser Thr Cys Thr Thr Pro
65          70          75          80
Ser Pro Ala Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Arg Tyr
          85          90          95

```

&lt;210&gt; 43487

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (53), (61), (290), (291), (292), (293), (294), (295), (296), (297), (298)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43487

```

Met Leu Trp Ser Pro Leu Arg Thr Ser Ala Ser Tyr Pro Pro Leu Leu
1      5      10      15
Phe Ser Leu Leu Pro Pro Phe Leu His Val Leu Phe Asn Ala Trp Ile
      20      25      30
Val Gln His Pro Phe Leu His Arg Phe Ser Phe Leu Leu Ser Gln
      35      40      45
Phe Val Met His Xaa Ser His Ser Leu Gln Phe Lys Xaa Ser Phe Lys
      50      55      60
Met Lys Ser Thr Phe Gly Leu Leu Ala Leu Ala Ala Ala Lys Leu
      65      70      75      80
Val Ser Ala His Ala Thr Val His Ala Val Trp Ile Asn Asp Val Asp
      85      90      95
Gln Gly Ala Gly Asn Ser Ala Asp Gly Tyr Ile Arg Ser Pro Pro Asn
      100     105     110
Asn Ser Pro Ile Thr Asp Val Thr Ser Thr Asp Met Thr Cys Asn Val
      115     120     125
Asn Gly Lys Asn Pro Val Ala Lys Thr Leu Ser Val Lys Ala Gly Asp
      130     135     140
Lys Val Thr Phe Glu Trp His His Asp Thr Arg Ser Asp Ser Asp Asp
      145     150     155     160
Ile Ile Ala Ser Ser His Met Gly Pro Val Met Val Tyr Met Ala Pro
      165     170     175
Thr Glu Lys Gly Thr Ala Gly Asn Gly Trp Val Lys Ile Ala Glu Glu
      180     185     190
Gly Tyr Ser Asn Gly Lys Trp Ala Val Ala Asn Leu Ile Ala Asn Arg
      195     200     205
Gly Lys His Ser Ile Thr Val Pro Asp Val Pro Ala Gly Glu Tyr Leu
      210     215     220
Leu Arg Pro Glu Ile Ile Ala Leu His Glu Gly Asn Arg Gln Gly Gly
      225     230     235     240
Ala Gln Phe Tyr Met Glu Cys Val Gln Val Lys Val Thr Ser Ala Gly
      245     250     255
Thr Lys Thr Leu Pro Ala Gly Val Ser Ile Pro Gly Ala Tyr Lys Ala
      260     265     270
Thr Asp Pro Gly Val Leu Phe Asp Met Tyr Asn Ser Phe Thr Ser Val
      275     280     285
Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Leu
      290     295     300

```

&lt;210&gt; 43488

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (55)

## 19630

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43488

```

Phe Ser Glu Phe Asn Ser Ile Phe Cys Phe Glu Glu Val Leu Thr Thr
1           5           10           15
Gln Pro Val His Cys Leu Gly Cys Arg His Val Leu His Cys Trp Cys
          20           25           30
Ile Glu Lys Trp Phe Met Arg Phe His Asn Thr Cys Pro Val Cys His
          35           40           45
Arg Thr Ile Cys Ser Asp Xaa Thr Val Asp Ile Val
          50           55           60

```

<210> 43489

<211> 69

<212> PRT

<213> A.fumigatus

<400> 43489

```

Asp Ser Arg Ile Asp Leu Phe Pro Tyr Pro Cys Ile Arg Arg Val His
1           5           10           15
Leu Ile His Val Asp Ser Ala Val Arg Thr Ile Tyr Asn Gly Pro Ser
          20           25           30
Pro Pro Phe His Phe Thr Phe Gly Leu Gln His Ala Ile Ala Ser Val
          35           40           45
Asp Gly Leu Arg Ile Ser Gly Met Ile Ser Leu Ser Asp Gly Ser Lys
          50           55           60
His Tyr Ile Leu Glu
          65

```

<210> 43490

<211> 155

<212> PRT

<213> A.fumigatus

<400> 43490

```

Arg Tyr Val Leu Thr Gln Phe Arg Gln Gln Gly Ser Glu Gly Leu Glu
1           5           10           15
Glu Tyr Ala Asn Ala Ser Leu Asp Tyr Ala Ser His Asp Gly Thr Ala
          20           25           30
Ile Arg Asp Tyr Ile His Ile Leu Asp Leu Ala Asp Gly His Leu Lys
          35           40           45
Ala Leu Asn Tyr Leu Arg Ala Asn Asn Pro Gly Val Arg Ala Trp Asn
          50           55           60
Leu Gly Thr Gly Lys Gly Ser Thr Val Tyr Glu Met Ile Arg Ala Phe
          65           70           75           80
Ser Ala Ala Val Gly Arg Asp Leu Pro Tyr Glu Val Ala Pro Arg Arg
          85           90           95
Ala Gly Asp Val Phe Asn Leu Thr Ser Asn Pro Thr Arg Ala Asn Lys
          100          105          110
Glu Leu Gly Trp Lys Ala Gln Arg Thr Leu Glu Gln Ala Cys Glu Asp
          115          120          125
Leu Trp Arg Trp Thr Lys Asn Asn Pro Gln Gly Tyr Arg Gln Gln Arg
          130          135          140
Leu Thr Ala Gly Ala Arg Leu Asn Ala Trp Tyr
          145          150          155

```

## 19631

<210> 43491  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 43491  
 Ser Tyr Gln His Ser Phe Pro Asp Lys Gln Leu Phe Arg Leu Asp Gln  
 1 5 10 15  
 Ser Ile Ile Thr Met Tyr Gln Pro Leu Leu Leu Leu Pro Leu Leu Leu  
 20 25 30  
 Thr Ser Ala Phe Ala Thr Pro His Asp Pro Thr Thr His His Ala Leu  
 35 40 45  
 Glu Lys Arg Ala Ser Phe Pro Ile Pro Ser Ser Lys Gly Ile Val Thr  
 50 55 60  
 Tyr Ser Ser Pro Lys Asn Ile Ser Gly Thr Phe Asp Cys Gly Leu Lys  
 65 70 75 80  
 Asn Tyr Arg Arg Gly Val Lys Cys Thr Gly His Lys Arg Lys Leu Leu  
 85 90 95

<210> 43492  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 43492  
 Cys Trp Met Ala Asn Tyr Lys Leu Ala Phe Pro Asn Ile Thr Ser Leu  
 1 5 10 15  
 Thr Ser Phe Asn Ala Ser Ser Ala Lys Thr Thr Met Phe Arg Ser Arg  
 20 25 30  
 Ser Val Pro His Pro Val Ser Thr Ser Arg Val Asn Val Pro Cys Gly  
 35 40 45  
 Val Asp Thr Ala Asn Ala Thr Tyr Pro Leu Pro Val Asp His  
 50 55 60

<210> 43493  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 43493  
 Asn Gln Leu Tyr Thr Leu Glu Ser Arg Ile Ala Phe Ala Gly Trp Thr  
 1 5 10 15  
 Gln Ser His Ile Asp Ser Tyr Gln Gly Pro Thr Pro Asp Ile Val Ala  
 20 25 30  
 Gly Leu Ala Gln His Val Arg Asn Thr Leu Gln Pro Thr Tyr Thr Val  
 35 40 45  
 Ala Glu Ser Gly Thr Ala Gly Pro Thr Gly Gly Ala Thr Arg Asn Arg  
 50 55 60  
 Thr Pro  
 65

<210> 43494  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43494  
 Ala Gly His Val Xaa Asp Met Leu Phe Gln Gly Val Val Lys Ile Phe  
 1 5 10 15  
 Leu Gln Val Arg Ser Val His Pro Pro Asp Asn Ile Thr Leu His Thr  
 20 25 30  
 Pro Thr Val Ala Thr Asp Ala Thr Asp Ala Ser Ser Gln Ala Val Ala  
 35 40 45  
 His Leu Leu Thr Leu Thr Phe Leu Ser Ile Ile Ser Cys Asp Ile Thr  
 50 55 60  
 Val Leu Lys  
 65

<210> 43495  
 <211> 186  
 <212> PRT  
 <213> A.fumigatus

<400> 43495  
 Thr Cys Pro Ala Glu Cys Asp Tyr Thr Cys Arg His Val Val Thr Asp  
 1 5 10 15  
 Arg Arg Leu Ala Arg Asp Pro Pro Met Leu Asn Pro Val Val Gln Phe  
 20 25 30  
 His Gly Lys Trp Pro Phe Arg Arg Ile Leu Gly Met Gln Glu Pro Phe  
 35 40 45  
 Ser Val Leu Leu Ser Leu Ile Asn Ile Ile Ala His Trp Asn Gly Ile  
 50 55 60  
 Gly Arg Ile Lys Glu Thr Val Pro Ala Trp His Ser Leu Arg Pro Tyr  
 65 70 75 80  
 Tyr Leu Thr Phe Gly Tyr Cys Gly Leu Ala Cys Trp Thr Phe Ser Met  
 85 90 95  
 Leu Phe His Thr Arg Asp Phe Pro Leu Thr Glu Lys Leu Asp Tyr Phe  
 100 105 110  
 Gly Ala Gly Ala Asn Val Met Tyr Gly Leu Tyr Leu Ala Ile Ile Arg  
 115 120 125  
 Ile Leu Arg Leu Asp Gln Gly Lys Pro Arg Tyr Lys Pro Thr Leu Arg  
 130 135 140  
 Arg Leu Thr Thr Thr Ile Cys Val Leu Leu Tyr Thr Met His Val Cys  
 145 150 155 160  
 Tyr Ile Ser Phe Trp Ser Trp Glu Tyr Thr Tyr Ser Leu Leu Pro Arg  
 165 170 175  
 Gly Asp Arg His Pro Arg Lys Gly Gly Glu  
 180 185

<210> 43496  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 43496  
 Thr Pro Ser Met Gln Ile Pro Gly Pro Ser Arg Arg Arg Arg Leu His  
 1 5 10 15



## 19633

Leu Asp Leu Gly Ala Ala Gln Asn Asn Glu Ser Val Leu Ile Ser Ser  
                   20                  25                  30  
 Lys Tyr Pro Thr Arg Arg Lys Ser Ala Val Ser Thr Tyr Val Val Ile  
                   35                  40                  45  
 Ala Arg Ala Ala Arg Ser Ile Arg Ile Ala Ala Thr Ala Asp Lys Thr  
                   50                  55                  60  
 Gly Ala Trp Ala Arg  
 65

&lt;210&gt; 43497

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18), (62), (68)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43497

Asp Pro Gly Gln Val Leu Arg Pro His Val Glu His Arg His Asn Val  
 1                  5                  10                  15  
 Lys Xaa Gln Ala Lys Lys Gly His Asp Leu Gly Met Met Gly Val Leu  
                   20                  25                  30  
 Ile His Val Leu Gly Asp Ala Ala Asn Asn Leu Gly Gly Tyr Ile Ala  
                   35                  40                  45  
 Ala Leu Val Val Trp Lys Ala Asn Met Arg Gly Asp Thr Xaa Pro Asn  
                   50                  55                  60  
 Leu Leu Ser Xaa Trp Arg Met Arg Ser  
 65                  70

&lt;210&gt; 43498

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43498

Ser Cys Gly Leu His Cys Arg Ala Gly Gly Ala Gln Gly Ser Arg Ala  
 1                  5                  10                  15  
 Pro Ser Cys Leu Thr Val Glu Ser Lys Leu Lys Ser Gln Ile Ser Gln  
                   20                  25                  30  
 Arg Ser Lys His Pro Lys Glu Leu Ser Phe Gly Trp Gln Arg Ala Gln  
                   35                  40                  45  
 Leu Leu Gly Ala Phe Phe Asn Gly Val Phe Leu Leu Ser Leu Gly Ile  
                   50                  55                  60  
 Ser Ile Phe Leu Gln Ser Ile Asp Arg Phe Val Ser Leu Glu Arg Thr  
 65                  70                  75                  80  
 Val Tyr Arg Pro Gly Gly Asn Val Thr Asp Thr Cys Arg Asn  
                   85                  90                  95

&lt;210&gt; 43499

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43499

## 19634

```

Pro Ser Leu Leu Val Ser Cys Val Gln Ile Tyr Ile Thr Gly Lys Ser
1          5          10          15
Thr Ala Ser Pro Val Ser Lys Ala Leu Leu Thr Pro Ser Gln Thr Ile
          20          25          30
Asn Ala Arg Asn Pro Ser Ser Pro Glu His Leu Gly Gly Ser Leu Pro
          35          40          45
Ala Ile Thr Ser Thr Lys Cys Ala Ser Cys Lys Ser Asn Gly Ala Ala
          50          55          60
Phe Trp Ser Thr Ser Asn Leu Ser Thr Ala Asn Cys Ser Val Gln Leu
65          70          75          80
Phe Ser Ala Arg Pro Ser
          85

```

&lt;210&gt; 43500

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (15), (35), (102)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43500

```

Xaa Leu Ser Arg Arg Leu Ile Ser Gly Gly Arg Thr Glu Trp Xaa Leu
1          5          10          15
Ser Ile Pro Ser Gly Gly Val Ile Pro Ile Asn Leu Val His Asp Met
          20          25          30
Asp Thr Xaa Gln Tyr Leu Phe Gly Pro Ile Thr Arg Val His Ala Glu
          35          40          45
Arg Thr Pro Arg Gln Arg Ala Asn Pro Pro His Glu Val Glu Glu Gly
          50          55          60
Ala Ala Leu Ile Leu Arg Phe Ala Ser Gly Val Val Gly Thr Phe Ile
65          70          75          80
Val Cys Asp Ala Thr Pro Ser Pro His Asn Phe Glu Met Gly Thr Gly
          85          90          95
Glu Asn Pro Leu Ile Xaa Gly Pro Pro Gly Ala Ser Glu Gly Gly Gly
          100          105          110
Gly Ala Asp Phe Tyr Arg Ile Phe Gly Ser Glu Ala Cys Leu Ser Val
          115          120          125
Pro Asp Met Thr Arg Trp Ser Tyr Asp Gly Arg Ala Glu Lys Ser Trp
          130          135          140
Thr Glu Gln Leu Ala Val Glu Arg Phe Glu Val Asp Gln Lys Ala Ala
145          150          155          160
Pro Phe Asp Leu Gln Leu Ala His Phe Val Glu Val Ile Ala Gly Arg
          165          170          175
Glu Pro Pro Arg Cys Ser Gly Glu Asp Gly Leu Arg Ala Leu Met Val
          180          185          190
Cys Glu Gly Val Arg Arg Ala Leu Glu Thr Gly Glu Ala Val Asp Leu
          195          200          205
Pro Val Ile
          210

```

&lt;210&gt; 43501

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43501

```

Ile Pro Ser Arg Ile Met His Leu Leu Gln Cys Leu Leu Ser Thr Ile
1          5          10          15
Ser Leu Ala Ser Thr Val Thr Ala Phe Val Leu Tyr Ser Phe Asn Leu
          20          25          30
Glu Val Ser Thr Glu Gly Pro Pro Ser Asn Asp Val Ala Arg Arg Phe
          35          40          45
Val Pro Trp Lys Leu Leu Leu Asp Asp Ser Tyr Asn Asn His Gly Ser
          50          55          60
Ser Ser Asn Gly Val Ser Leu Thr Leu Asp Leu Lys Lys Phe Pro Val
65          70          75          80
Arg Arg Asp Asn Lys Tyr Lys Val Val Leu Ala Asp Glu Pro Thr Thr
          85          90          95
Pro Asn Thr Ala Ala Leu Asn Gln Glu Gly Leu Asp Tyr Ser Tyr Phe
          100          105          110
Ala Thr Val Arg Val Gly Ser Gln Gly Gln Gln Met Trp Leu Val Leu
          115          120          125
Asp Thr Gly Gly Pro Asn Thr Trp Phe Phe Gly Ser Asp Cys Thr Pro
          130          135          140
Val Ser
145

```

&lt;210&gt; 43502

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43502

```

Lys Glu Ser Ala Arg Arg Arg Gly Phe Asn Ser Gly His Arg Leu Pro
1          5          10          15
Ser Gly His Val Asn Ile Phe Gln Val Ala Ile Val Leu Ser Gly Phe
          20          25          30
Asp Asp Lys Asp Phe Asp Ile Arg Ile Leu Arg Lys Thr Gly Arg Asp
          35          40          45
Tyr Thr Ala Arg Gly Ser Ser Thr Ala Asn Gly Glu Leu Glu Pro Ala
          50          55          60
Arg Gly Ile Leu Ala Asp Asp Ile Arg Thr His Arg
65          70          75

```

&lt;210&gt; 43503

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43503

```

Thr Leu Ala Ser Trp Leu Thr Pro Ser Arg Trp Ser Asn Asn Phe Asp
1          5          10          15
Ser Glu Thr Asp Trp Asn Leu Ile Thr Lys Pro Met Pro Gly Val His
          20          25          30
Asn Arg Gln Val Lys Leu Ser Arg Gly Arg Phe Leu Gly Gly Ser Ser
          35          40          45
Gly Cys Asn Gly Pro Leu Cys Ile Arg Gly Ala Gln Gln Asp Tyr Asp
          50          55          60
Asp Trp Glu Leu Glu Gly Trp Ser Gly Glu Glu Phe Phe Ala Ala Met

```

80

<400> 43504

```
<210> 43505
<211> 81
<212> PRT
<213> A.fumigatus
```

<400> 43505

<210> 43506  
<211> 63

19637

<212> PRT  
<213> A.fumigatus

<400> 43506

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Pro | Val | Val | Arg | Glu | Gly | Pro | Pro | Arg | Pro | Glu | Pro | Gly | Ser | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Lys | Ser | Pro | Val | Lys | Ala | Gly | Gly | Gly | Ser | Pro | Lys | Lys | Gly | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Asp | Glu | Lys | Pro | Pro | Arg | Leu | Glu | Leu | Ala | Leu | Asp | Leu | Pro | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asn | Asn | Pro | Val | Ser | Gln | Lys | Gly | Asp | Asn | Leu | Ser | Asn | Trp | Leu |     |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

<210> 43507

<211> 89

<212> PRT

<213> A.fumigatus

<400> 43507

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Cys | His | Arg | Val | Val | Lys | Thr | Glu | Asp | Asp | Leu | Val | Leu | Ala | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Tyr | Ala | Pro | Trp | Cys | Gly | His | Cys | Lys | Ala | Leu | Ala | Pro | Lys | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Glu | Ala | Ala | Thr | Glu | Leu | Lys | Gly | Lys | Asn | Ile | Pro | Leu | Val | Lys |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Val | Asp | Cys | Thr | Glu | Glu | Glu | Asp | Leu | Cys | Lys | Glu | Asn | Gly | Val | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Tyr | Pro | Thr | Leu | Lys | Ile | Phe | Arg | Gly | Pro | Asp | Ser | Ser | Lys | Pro |
|     | 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Tyr | Gln | Gly | Ala | Arg | Gln | Ala | Asp | Ser |     |     |     |     |     |     |     |
|     |     |     |     |     | 85  |     |     |     |     |     |     |     |     |     |     |

<210> 43508

<211> 181

<212> PRT

<213> A.fumigatus

<400> 43508

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Thr | Thr | Arg | Ser | Asp | Met | Leu | Ile | Gln | Val | Gln | Gly | Arg | Val | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Thr | Arg | Thr | Phe | Asp | Gly | Arg | Glu | Leu | Asn | Asn | Glu | Tyr | Ile | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Leu | Phe | Ser | Asp | Pro | Asp | His | Leu | Ser | Leu | Val | Gly | Val | Pro | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Tyr | Ser | Ile | Thr | Gln | Phe | Thr | Ala | Asn | Asp | Asp | Ile | Ala | Ser | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Thr | Val | Val | Thr | Phe | Asn | Ser | Thr | Ser | Phe | Asn | Ile | Ile | Ile | Pro |
|     | 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Val | Thr | Ile | Asp | Thr | Trp | Ile | Glu | Trp | Asp | Ala | Gln | Lys | Lys | Ile | Leu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Gln | Tyr | Asp | Ala | Thr | Phe | Arg | Trp | Phe | Gly | Pro | Leu | Leu | Asp | Ala | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Lys | Ala | Gln | Ala | Ala | Arg | Met | Asn | Thr | Thr | Asp | Pro | Val | Val | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     | 125 |     |     |     |     |
| Gln | Ala | Ala | Leu | Thr | Gln | Leu | Leu | Ala | Asp | Thr | Ile | Cys | Gln | Thr | His |
|     |     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |

## 19638

Glu Asp His Cys Lys Gly Glu Tyr Gln Gln Tyr Glu Ser Arg Asp Ala  
 145 150 155 160  
 Cys Met Asp Phe Val Pro Asn Lys Ser Leu His Gln Gly Ala Gly Arg  
 165 170 175  
 Ile Arg Ala Leu Arg  
 180

<210> 43509  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 43509  
 Pro Ser Ser Ala Ala Val Leu Arg Gly Met Leu His Gln Leu Val Leu  
 1 5 10 15  
 Arg Gln Ile Ser Glu Asn Ser Glu Ile Gly Gly Gly Asp Val Pro Thr  
 20 25 30  
 Ser Ser Lys Gln Gly Thr Gly Asp Leu Tyr Leu Pro Gln Ile Tyr Glu  
 35 40 45  
 Phe Leu Leu Ser Ser Lys Leu Leu Asn Ala His Ser Leu Ser Pro Ile  
 50 55 60

<210> 43510  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<400> 43510  
 Thr Leu Ile Phe Gln Pro Gly Gly Glu Asp Ala Ser Ala Pro His Leu  
 1 5 10 15  
 Arg Val Ser Ala Ala Lys Asn Gln Gly Asp Arg Ser Ser Thr Asp Thr  
 20 25 30  
 Gln Pro Ser Ala Arg Ile Pro Pro Glu Gln Ser Ala Val Glu Asp  
 35 40 45  
 Lys Phe Phe Trp Thr Tyr Thr Glu Glu Pro His Arg Ser Arg Arg Gln  
 50 55 60  
 Ala Ile Ile Lys Ala His Pro Glu Val Gly Ile Leu  
 65 70 75

<210> 43511  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 43511  
 Gly Gln Gly Leu Ser Ile Leu Leu Thr Lys Glu Met Ile Asn Pro Phe  
 1 5 10 15  
 Leu Pro Leu Ile Lys Ser Ser Thr Pro Asp Pro Pro Leu Arg Thr Pro  
 20 25 30  
 Lys Ile Cys Gln Met Cys Ser Thr Val Tyr Ser Lys Tyr Leu Gln Arg  
 35 40 45  
 Ile Pro Thr Gln Asn Arg His Phe Arg Asn Ser Tyr  
 50 55 60

<210> 43512  
 <211> 230

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (194), (209), (210)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43512

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ala | Ile | Ala | Phe | Leu | Pro | Ala | Arg | Gly | Glu | Asp | Leu | Asp | Met | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Tyr | Gly | Asp | Ile | Asp | Ala | Phe | Ala | Arg | Arg | Cys | Cys | Asp | Leu | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Ile | Asp | Tyr | Val | Ile | Leu | Asn | Ala | Ala | Met | Gln | Ser | Ser | Ile | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Arg | Arg | His | Lys | Ala | Gly | His | Glu | Leu | Val | Phe | Gln | Val | Asp | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ser | Thr | Ala | Leu | Leu | Cys | Met | Leu | Leu | Ala | Ser | Val | Leu | Lys | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gln | Ser | Arg | Val | Gly | Ala | Val | Thr | Lys | Pro | Pro | Val | Leu | Thr | Val | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Ser | Asp | Thr | Met | Tyr | Leu | Ser | Lys | Phe | Gln | Ala | Ala | Gly | Pro | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Pro | Arg | Met | Asp | Asp | Pro | Thr | Gly | Tyr | Asp | Arg | Met | Arg | Gln | Tyr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Met | Asp | Ser | Lys | Leu | Leu | Leu | Met | Val | Phe | Val | Arg | Gln | Leu | Ala | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gln | Val | Asn | Pro | Asp | Asp | Val | Val | Ile | Asn | Val | Cys | Asn | Pro | Gly | Met |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | Ala | Gly | Thr | Gly | Leu | Gly | Lys | Asn | Gly | Lys | Pro | Asn | Pro | Ser | Phe |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala | Glu | Lys | Asp | Val | Val | Pro | Val | Phe | Val | Lys | Ala | Leu | Gly | Arg | Lys |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Val | Xaa | Ser | Gly | Ala | Ser | Val | Tyr | Val | His | Ala | Leu | Leu | Ala | Glu | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Xaa | Xaa | Ser | His | Gly | Ser | Phe | Ile | Ser | Asp | Trp | Thr | Ile | Lys | Pro | Tyr |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ala | Gly | Val | Asp | Val | Tyr |     |     |     |     |     |     |     |     |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43513

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43513

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ala | Gly | Gln | Asp | Phe | Pro | Asn | Asn | Asp | Asn | Asp | Asn | Arg | Arg | Met |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Trp | Arg | Asp | Tyr | Leu | Pro | His | Thr | Gln | Tyr | Leu | Thr | Asp | Ser | Ala | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Gln | Ala | Tyr | Gln | Ala | Asp | His | Asp | Asp | Phe | Leu | Ala | Arg | Ile | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Cys | Leu | Gln | Ser | Asp | Gly | Arg | Tyr | Gly | Lys | Ala | Glu | Ile | Ile | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Arg | Asn | Ala | Leu | Glu | Ile | Arg | Glu | Arg | Ala | Cys | Gly | Leu | Asp | His | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |

## 19640

Asp Thr Leu Ala Ser Ile Ser Gln Leu Gly Ser Val Leu Asp Asn Gln  
                   85                  90                  95  
 Gly Lys Tyr Glu Glu Ala Glu Ala Met His  
                   100                  105

&lt;210&gt; 43514

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (145)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43514

Ser Ser Leu Phe Leu Thr Gly Thr Gly Leu Phe Val Gly Ser Gly Lys  
 1                  5                  10                  15  
 Val Leu Ser Thr Gly Gly Pro Ala Ser Val Leu Ile Ala Tyr Ala Leu  
                   20                  25                  30  
 Ile Gly Cys Met Leu Phe Cys Thr Val His Ala Leu Gly Glu Met Ala  
                   35                  40                  45  
 Val Leu Phe Pro Val Ala Gly Ser Phe Ala His Tyr Ser Thr Arg Phe  
                   50                  55                  60  
 Ile Asp Pro Ala Trp Gly Phe Ala Met Gly Trp Asn Tyr Ala Leu Gln  
 65                  70                  75                  80  
 Trp Leu Ile Val Leu Pro Leu Glu Ile Val Ala Ala Ser Ile Thr Val  
                   85                  90                  95  
 Asp Tyr Trp Glu Ser Asn Ile Ser Asn Ala Ala Trp Val Ala Ile Phe  
                   100                  105                  110  
 Trp Ala Val Ile Val Ser Ile Asn Leu Phe Gly Val Lys Gly Tyr Gly  
                   115                  120                  125  
 Glu Ala Glu Phe Val Phe Ser Leu Ile Lys Val Ile Ala Val Ile Gly  
                   130                  135                  140  
 Xaa Met  
 145

&lt;210&gt; 43515

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (11)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43515

Pro His Ser Arg Xaa Ser Ser Leu Gly Lys Xaa Tyr Ser Leu Gly Tyr  
 1                  5                  10                  15  
 Pro Ala Ala Ser Val Asp Trp Phe Leu Gln Gln His Thr Ala Phe Tyr  
                   20                  25                  30  
 Ile His Leu Trp Asn Tyr Phe Asn Ala Phe Pro Glu Glu Val Ala Arg  
                   35                  40                  45  
 Tyr Thr Glu Val Glu Lys Val Gly Gly Leu Ala Arg Val Thr Arg Leu  
                   50                  55                  60



## 19641

Gln Thr Leu Leu Thr Asp Ala Leu His Ser Thr Ser Glu Val Gly Ala  
 65 70 75 80  
 Pro Ser Pro Ile Val Pro Trp Phe Thr Val Cys Ser Leu Cys Lys Val  
 85 90 95  
 Arg Pro Gly Trp Met Cys Arg  
 100

<210> 43516  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 43516  
 Val Ala Arg Arg Gly Arg Gly Pro Ser Ser Pro Val Val Lys Thr Thr  
 1 5 10 15  
 Pro Glu Lys Phe Asp Met Arg Glu Lys Ile Glu Leu Ile Gln Arg Ser  
 20 25 30  
 Phe His Pro Val Val Glu Phe Gly Arg Asp Phe Ser Val Ile Leu Gln  
 35 40 45  
 Asn Met Gly Lys Ser Leu Tyr Gln Arg Gly Pro Asn Thr His Asp Leu  
 50 55 60  
 Ile Gly Leu Tyr Val Ala Asp Thr Gln Met Thr Ala Ala Leu Leu Thr  
 65 70 75 80  
 Thr Lys Trp Lys Ser Tyr Gln Ser Leu Phe Phe Gly Leu Arg His Ala  
 85 90 95  
 Leu Tyr Leu Ser Ala Glu Phe  
 100

<210> 43517  
 <211> 183  
 <212> PRT  
 <213> A.fumigatus

<400> 43517  
 Asn Thr Pro Ser Ser Asp Leu Asn Tyr Leu Pro Ser Ser Arg Ser His  
 1 5 10 15  
 Ala His Cys Cys Gln Ala Leu His Asn Gln Val Thr Pro Glu Lys Ala  
 20 25 30  
 Leu Lys Ser Gln Thr Arg Arg Arg Lys Asn Arg Ser Pro Leu Arg Arg  
 35 40 45  
 Phe Lys Asp Leu Cys Leu Lys His Thr Trp Val Leu Pro Leu Leu Leu  
 50 55 60  
 Met Ser Val Ile Leu Leu Ala Tyr Ala Val Asn Pro Thr Pro Ala Asn  
 65 70 75 80  
 Pro Phe His Ser Ala Ile Phe Leu Ser Tyr Pro Gln Pro Pro Lys Thr  
 85 90 95  
 Pro Gly Gly Pro Val Met Tyr Gly Lys Gly Pro Leu Asp Phe Ala Phe  
 100 105 110  
 Val Gly Phe Tyr Thr Ile Val Leu Ser Phe Thr Arg Glu Phe Leu Met  
 115 120 125  
 Gln Cys Val Ile Arg Pro Trp Ala Gly Tyr Cys Gly Ile Arg Gly Arg  
 130 135 140  
 Gly Lys Thr Ala Arg Phe Met Glu Gln Val Tyr Thr Ala Met Tyr Phe  
 145 150 155 160  
 Ala Ile Phe Gly Pro Phe Gly Leu Tyr Val Met Lys Gln Thr Asp Ile  
 165 170 175

19642

Trp Tyr Phe Asn Thr Thr Gly  
180

<210> 43518

<211> 180

<212> PRT

<213> A.fumigatus

<400> 43518

Phe Val Asn Thr Phe Pro Gln Arg His Ala Leu Val Ile Phe Gly Glu  
1 5 10 15  
Ala His Gly Arg Glu Thr Trp Asp Ser Ser Val Asp Val Thr Arg Thr  
20 25 30  
Ile Gly Trp Phe Thr Thr Leu Trp Pro Val Val Ala Gln Val Asn Pro  
35 40 45  
Ser Asp Ser Leu Glu Thr Val Ala Arg Thr Val Arg Gln Ala Arg Arg  
50 55 60  
Ala Met Asp Met His Gly Trp Thr His Phe Thr Ser Val Tyr His Asn  
65 70 75 80  
Thr Arg Gln Thr Lys Arg Ser Ala Gly Ala His Leu Met Glu Ile Thr  
85 90 95  
Phe Asn Tyr Ala Gly Lys Phe Gln Gln Val Glu Gln Asp Gly Ser Leu  
100 105 110  
Phe Arg Met Glu Pro Met Ala Lys Gln Asn Leu Leu Asp Gly Ala Ala  
115 120 125  
Glu Leu Gly Arg Trp Ala Met Leu Glu Ile Asn Ser Val Ile Leu Asn  
130 135 140  
Gly Leu Leu Glu Phe His Val Pro Tyr Asn Arg Gly Thr Asp Glu Ala  
145 150 155 160  
Arg Pro Val Thr Pro Trp Leu Val Asn Ala Ser Ala Arg Gln Asn Trp  
165 170 175  
Lys Glu Thr Arg  
180

<210> 43519

<211> 102

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (39)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43519

Ile Lys Val Pro Arg Val Cys His Gly Thr Cys Ile Ser Lys Ser Asn  
1 5 10 15  
Lys Lys Gln His Gln Asn Tyr Ala Arg Pro Ser Pro Lys Arg His  
20 25 30  
Lys Pro Val Arg Met Ser Xaa Pro Arg Ile Ser Pro Cys Ser Pro Pro  
35 40 45  
Pro Arg Arg Glu Pro Ser Ser Glu Gly Ile Pro Gly Gly Phe Phe Ser  
50 55 60  
Pro Leu Ser Ser Ser Ile Tyr Phe Pro Ala Leu Asp Thr Ile Ala Ser  
65 70 75 80  
Ser Leu Gln Val Ser Ile Thr Lys Ile Asn Leu Thr Val Thr Thr Tyr

## 19643

85  
Leu Val Cys Ile Val Lys  
100

90

95

<210> 43520  
<211> 185  
<212> PRT  
<213> A.fumigatus

<400> 43520  
Leu Leu Gln Gly Ala Ser Pro Met Leu Ile Ala Gly Phe Ser Asp Lys  
1 5 10 15  
Val Gly Arg Arg Pro Ala Tyr Ile Ile Cys Phe Thr Ile Tyr Ile Ala  
20 25 30  
Ala Asn Ile Gly Leu Ser Leu Gln Asn Ser Tyr Ala Ala Leu Met Val  
35 40 45  
Leu Arg Cys Ile Gln Ser Ala Gly Ser Ser Gly Thr Val Ala Leu Ser  
50 55 60  
Asn Gly Leu Val Gly Asp Met Ile Thr Ser Ala Glu Arg Gly Ser Tyr  
65 70 75 80  
Ile Ala Val Ala Ser Ile Gly Leu Met Leu Gly Pro Ser Leu Ser Pro  
85 90 95  
Ile Ile Gly Gly Leu Ile Ser Gln Tyr Leu Asp Trp His Trp Ile Phe  
100 105 110  
Trp Phe Leu Leu Ile Leu Ser Ser Val Phe Phe Ala Ile Leu Leu Leu  
115 120 125  
Phe Leu Pro Glu Thr Cys Arg Lys Val Val Gly Asp Gly Ser Val Pro  
130 135 140  
Pro Pro Pro Leu Asn Asn Asn Val Ser Asp Ile Ile Arg His Arg Arg  
145 150 155 160  
Arg Lys Arg Ala Gly Leu Ala Ala Asp Gln Ala Ser Ile Ala Gly Leu  
165 170 175  
His Glu Gly Trp Lys Val Ile His Arg  
180 185

<210> 43521  
<211> 74  
<212> PRT  
<213> A.fumigatus

<400> 43521  
Ser Met Arg Pro Ser Ser Cys Ile Pro Phe Ser Val Gly Leu Ala Val  
1 5 10 15  
Val Ala His Ala Ala Ser Pro Ser Thr Leu Glu Glu Leu Cys Thr Val  
20 25 30  
Ser Tyr Leu Gln Thr Val Leu Pro Ser Ser Lys Phe Ile Gln Gly Ile  
35 40 45  
Thr Ile Asp Ser Asp Ser Leu Thr Thr Ser Val Ala Thr Asn Ser Thr  
50 55 60  
Val Ser Ser Val Asp Tyr Pro Thr Ala Thr  
65 70

<210> 43522  
<211> 202  
<212> PRT  
<213> A.fumigatus

&lt;400&gt; 43522

Pro Val Ala Val Leu Pro Val Pro Gly Glu Asp Ala Phe Ile Tyr Val  
 1 5 10 15  
 Trp Asn Arg Cys Leu Gly Asp Tyr Val Gly Pro Leu Glu Glu Leu Ile  
 20 25 30  
 Ala Leu Ile Pro Ser Gln Ala Glu Ser Leu Val Asn Gly Asp Ser Ile  
 35 40 45  
 Asp Glu Pro Asn Leu His Ala Asn Ala Ala Lys Met Phe Pro Tyr Leu  
 50 55 60  
 Ser Phe Val Leu Thr Gly Arg Ile Tyr Pro Thr Gly Glu Glu Met Asp  
 65 70 75 80  
 Asp Ala Glu Ala Thr Arg Ala Lys Thr Ala Leu Tyr Asp Tyr Leu Phe  
 85 90 95  
 Ser Gly Asn Gln Ser Gly Thr Ser Gln Ala Ile Gly Arg Phe Pro Ser  
 100 105 110  
 Leu His Ala Met Leu Lys Phe Asp Ala Ser Ser Phe Met Ser Met Leu  
 115 120 125  
 Asn Glu Ala Phe Glu Asp Ser Phe Leu Asn Asp Gln Glu Pro Asp Glu  
 130 135 140  
 Ile Pro Ala Gln Gly Val Ser Ile Asn Arg Gln Tyr Leu Ile Ser Ile  
 145 150 155 160  
 Leu Phe Gln Val Met Thr Pro Thr Ser Phe Asp Ser Ser Asp Thr Ile  
 165 170 175  
 Tyr Leu Asp Met Phe Val Ala Arg Asn Leu Pro Lys Tyr Pro Gln Tyr  
 180 185 190  
 Ile Leu Leu Ser Gly Thr Thr Leu His Gln  
 195 200

&lt;210&gt; 43523

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43523

Cys Ala Asp Ile His Cys Gly Arg Pro Ser Arg Gly Glu Asp Leu Phe  
 1 5 10 15  
 Ser Ser Leu Pro Pro Gly Ala Glu Pro Pro Val Val Asp Asp His Ser  
 20 25 30  
 Tyr Tyr Ala Glu Tyr His Pro Gln Pro Pro Gln Asn Asp Asp Arg Ile  
 35 40 45  
 His Trp Thr Lys His Thr Gln Arg His Pro Val Ser Ser Phe Ile Pro  
 50 55 60  
 Leu Pro Thr Pro Ala Pro Ser Ala Ile Pro Arg Val Gln Tyr Glu Phe  
 65 70 75 80  
 Ala Lys Glu Ser Trp Leu Gly Arg Arg Lys Arg Val Asn Arg Gln Lys  
 85 90 95  
 Ala Val Lys Glu Ala Phe Thr His Ala Trp Lys Gly Tyr Lys Gln His  
 100 105 110  
 Ala Trp Met Arg Asp Glu Leu Ser Pro Leu Ser Ala Arg Tyr Arg Thr  
 115 120 125  
 Thr Phe Ala Gly Trp Ala Ala Thr Leu Val Asp Ala Leu Asp Thr Leu  
 130 135 140  
 Val Ile Met Gly Met Glu Asn Glu Phe Lys Asp Ala Leu His Ala Ile  
 145 150 155 160  
 Glu Ser Ile Asp

## 19645

<210> 43524  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 43524  
 Tyr Ser Gly Ala Leu Phe Pro Ala Pro Met Lys His Pro Phe Pro Gly  
 1 5 10 15  
 Gly Ala Phe Phe Leu Ser Phe Arg Ala Ser Phe Leu Asn Ser Leu Ile  
 20 25 30  
 Arg Ile Phe Ser Thr Gly Ala Val Leu Pro Arg Glu Thr Arg Gly Ser  
 35 40 45  
 Thr Gly Ala Val Phe Pro Pro Lys Gly Val Phe Tyr Lys Arg Leu  
 50 55 60  
 Ser Ser Pro Met Gly Ile Met Gly Gly Ala Val  
 65 70 75

<210> 43525  
 <211> 92  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (48), (65), (77), (80)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43525  
 Gly Ser Val Thr Ser Asn Phe Phe Ile Ile Asn Arg Glu Gly Trp Pro  
 1 5 10 15  
 Ile Leu Phe Tyr Gly Asp Val Leu Thr Leu Gln Phe His Met Ser Glu  
 20 25 30  
 Val Tyr Lys Leu Ala Pro Leu Leu Lys Ser Leu Gly Leu Lys Asn Xaa  
 35 40 45  
 Cys Ile Ser Val Cys Ala Lys Lys Lys Thr Ser Ile Ser Glu Met Pro  
 50 55 60  
 Xaa Glu Pro Ser Leu Glu Leu Met Thr Asp Phe Arg Xaa Lys Ala Xaa  
 65 70 75 80  
 Gly Leu Ser Lys Tyr Phe Ser Leu Ser His Arg Leu  
 85 90

<210> 43526  
 <211> 188  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (156)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43526  
 Ile Trp Thr Ser Glu Gly Ser Trp Arg His Ser Lys Ile Phe Pro Ala  
 1 5 10 15

[illegible]

19647

<210> 43528  
 <211> 175  
 <212> PRT  
 <213> A.fumigatus

<400> 43528  
 Thr Pro Ala Arg Thr Ile Ser Ile Asn Gln Met Gly Met Gln Ala Thr  
 1 5 10 15  
 Gly Ile Ser Pro Glu Val Leu Ile Ser Ile Glu Asp Gly Asp Val Tyr  
 20 25 30  
 Thr Glu Ala Leu Ala Gly Thr Gln Leu Ser Glu Ser Pro Glu Ala Ser  
 35 40 45  
 Leu Asp Pro Leu Asp Asn Lys Leu His Asn Asp Ala Lys Glu Val Met  
 50 55 60  
 Glu His Val Ile Ala Ile Lys Gly Ser Ser Arg Arg Leu Ser Pro Asp  
 65 70 75 80  
 Cys Leu Pro Glu Ser Ile Ala Phe Lys Asp Phe Met Lys Val Met Pro  
 85 90 95  
 Arg Gly Ser Val Gln His Leu Phe Ser His Val Arg Gly Arg Leu Arg  
 100 105 110  
 Ala Asp Cys Asp Gly Trp Asp Ala Leu Pro Gly Leu Ile Ala Asn Ile  
 115 120 125  
 Thr Val Pro Gly Met Pro Gly Pro Arg Asn Leu Glu Ala Ile Arg Cys  
 130 135 140  
 Phe Glu Pro Glu Pro Arg Asp Ile Tyr Cys Gly Ala Cys Ile Met Leu  
 145 150 155 160  
 Val Phe Thr Arg Glu Leu Pro Glu Pro Ala Ile Thr Val Gly Ile  
 165 170 175

<210> 43529  
 <211> 229  
 <212> PRT  
 <213> A.fumigatus

<400> 43529  
 Pro Lys Ala Gly Gly Asn Ala Val Ala Ala Asn Gly Ala Val Pro Ser  
 1 5 10 15  
 Leu Asn Asp Ala Leu Thr Gln Ala His Gly Met Gly Val Leu Thr Gly  
 20 25 30  
 Asp Pro Val Val Ser Val Pro His Ser Leu Asp Asp Val Ser Trp Arg  
 35 40 45  
 Ile Gly Gly Cys Val Ala Val His Leu Ser Leu Val His Ala Ala Lys  
 50 55 60  
 Thr Pro Glu Cys Leu Ser Leu Ala Val Glu Ala Leu Tyr Glu Ala Val  
 65 70 75 80  
 Gln Asp Asn Trp Arg Asn Ser Glu Ala Met Glu Arg Glu Asn Gly Tyr  
 85 90 95  
 Gly Ile Leu Ala Ala Ile Leu Arg Asp Lys Phe Gly Leu Gly Asn Ser  
 100 105 110  
 Ser Ala Thr Ser Arg Ala Ser Ser Ile Cys Ser Asn Leu Glu Glu Arg  
 115 120 125  
 Cys Ala Leu Gly Leu Asp Leu Leu Arg Leu Thr Leu Lys Phe Val Gly  
 130 135 140  
 Tyr Asp Phe Glu His Pro Asn Arg Ser Ile Ile Thr Asn Pro Leu Ala  
 145 150 155 160

## 19648

Tyr Arg Val Leu Leu Val Asp Leu Asp Ile Trp Arg Leu Gly Asp Ser  
                   165                  170                  175  
 Ala Gln Leu Ser Leu Tyr Tyr Ser Gln Phe Ser Thr Phe Ala Gly Glu  
                   180                  185                  190  
 Ser Asn Tyr Arg Arg Phe Asn Ala Lys Arg Leu Ser Ser His Ala Tyr  
                   195                  200                  205  
 Val His Thr Leu Ser Phe Ala Pro Ser Thr Ser Ser Pro Pro Ala Gly  
                   210                  215                  220  
 Gly Ser Thr Lys Asn  
 225

&lt;210&gt; 43530

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43530

Thr Ala Pro Thr Glu Lys Ser Tyr Thr Ser Val Leu Gln Met Ile Arg  
 1                  5                  10                  15  
 Ser Ser Ala Tyr Arg Pro Ile Gln Leu Leu Ala Phe Glu Pro Met Cys  
                   20                  25                  30  
 Met Asn Leu Cys Val Phe Ser Gly Ile Leu Leu Gly Ile Leu Tyr Leu  
                   35                  40                  45  
 Phe Phe Gly Ala Phe Glu Leu Val Phe Ser His Val Tyr Gly Phe Asn  
                   50                  55                  60  
 Leu Trp Gln Ile Gly Ser Ser Phe Leu Gly Ile Leu Val Gly Met Met  
                   65                  70                  75                  80  
 Ser Ala Ile Leu Thr Asp Pro Leu  
                   85

&lt;210&gt; 43531

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (3), (21), (70), (221)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43531

Xaa Thr Xaa Thr Pro Ser Pro Lys Ser Thr Asp Thr Met Ile Ser Ile  
 1                  5                  10                  15  
 Gly Thr His Arg Xaa Tyr Leu Ser Ile Ser Gly Pro Pro Arg His Asn  
                   20                  25                  30  
 Pro Pro Asp Pro Ile Val Val Phe Ile Ala Gly Ala Gly Asp Val Ala  
                   35                  40                  45  
 Ser Ser Tyr Cys Ala Val Gln Arg Leu Val Ala Pro Phe Ser Pro Leu  
                   50                  55                  60  
 Val Leu Tyr Asp Arg Xaa Gly Leu Gly Arg Ser Glu Ser Asn Pro Asn  
                   65                  70                  75                  80  
 Ala Pro Ser Pro Thr Ala Met Ser Ala Ala Ala Glu Leu His Thr Leu  
                   85                  90                  95  
 Leu Lys Thr Ala Asn Ile Pro Pro Pro Leu Ile Leu Ala Ala His Ser  
                   100                  105                  110  
 Tyr Gly Ala Ile Ile Ala Arg Glu Tyr Leu His Ser Tyr Ser Ser Asp



## 19649

|   |     |     |
|---|-----|-----|
| 115   | 120 | 125 |
| Val Ala Gly Met Val Leu Met Asp Ala Ser Thr Glu Arg Asn Ile Glu |     |     |
| 130   | 135 | 140 |
| Leu Phe Gln Asn Pro Asp Leu Asp Leu Ser Ala Met Ile Gly Asn Leu |     |     |
| 145   | 150 | 155 |
| Lys Phe Ser Glu Val Thr Gly Leu Arg Ala Ala Ala Gln Leu Ser Arg |     |     |
|   | 165 | 170 |
| Glu Glu Trp Arg Val Arg Ala Ile Asp Thr Ala Arg Gly Val Ala Thr |     |     |
|   | 180 | 185 |
| Ser Gln Ala Glu Ala Met Val Arg Glu Glu Val Cys Arg Ala Leu Ala |     |     |
|   | 195 | 200 |
| Glu Lys Glu Gln Phe Lys Lys Gln Ala Leu Gly Glu Xaa             |     |     |
| 210   | 215 | 220 |

&lt;210&gt; 43532

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43532

|   |    |    |
|---|----|----|
| Arg Leu Arg Arg Val Leu Ile Ala Thr Val Phe Tyr Thr Phe Pro His |    |    |
| 1   | 5  | 10 |
| Pro Phe Phe Tyr Asp Leu Arg Pro Ser Phe Met Glu Met Glu Asp Leu |    |    |
|   | 20 | 25 |
| Glu Lys His Arg Ser Ser Ser Phe Ser Pro Asn Glu Asp Ala Asn Lys |    |    |
|   | 35 | 40 |
| Ser Thr Pro Leu Leu Ser Asp Tyr Gly Asn Lys Gly Lys Pro         |    |    |
| 50  | 55 | 60 |

&lt;210&gt; 43533

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (77), (87)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43533

|   |     |     |
|---|-----|-----|
| Leu Ile Val Asp Phe Ser Ala Val Asp Trp Ser Ala Phe Val Asp Thr |     |     |
| 1   | 5   | 10  |
| Ile Pro Ala Met Phe Ala Leu Thr Phe Phe Gly Val Leu His Val Pro |     |     |
|   | 20  | 25  |
| Ile Asn Val Pro Ala Leu Gly Ile Ser Thr Gly Glu Glu Asn Leu Ser |     |     |
|   | 35  | 40  |
| Val Asp Arg Glu Leu Ile Ala His Gly Val Thr Asn Ala Leu Ser Ser |     |     |
|   | 50  | 55  |
| Phe Ala Gly Ser Ile Gln Val Arg Leu Asn Asn Leu Xaa Gly Ile Ile |     |     |
|   | 65  | 70  |
| Arg Phe Ile Tyr Ser Cys Xaa Ser Lys Thr Thr Leu Tyr Ser Leu Ile |     |     |
|   | 85  | 90  |
| Asn Leu Pro Phe His Pro His Thr Val Gly Ile Pro Leu Leu Gly Arg |     |     |
|   | 100 | 105 |
| Tyr His Ala Pro Pro Leu Val Thr Lys Gly Phe Pro Val Phe Gly Pro |     |     |
|   | 115 | 120 |
|   |     | 125 |

## 19650

Gly Glu Asn Leu  
130

<210> 43534

<211> 175

<212> PRT

<213> A.fumigatus

<400> 43534

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Arg | Tyr | Phe | Gln | Phe | Arg | Gly | Arg | Ser | Ser | Glu | Asp | Asn | Pro | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Leu | Ala | Thr | Thr | Ile | Leu | Ala | Phe | Ser | Ala | Ser | Ser | Val | Leu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Gly | Leu | Val | Phe | Phe | Leu | Met | Gly | Thr | Cys | Lys | Leu | Gly | Ser | Leu |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Gly | Phe | Phe | Pro | Arg | His | Ile | Leu | Ile | Gly | Cys | Ile | Gly | Gly | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Phe | Phe | Leu | Met | Gln | Thr | Gly | Val | Glu | Val | Ser | Ala | Arg | Leu | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly | Ser | Leu | Glu | Leu | Asn | Gly | Pro | Thr | Leu | Gln | Lys | Leu | Phe | His | Met |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Thr | Phe | Leu | Leu | Trp | Met | Ile | Pro | Leu | Phe | Leu | Ala | Ile | Ala | Phe |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Val | Leu | Lys | Arg | Phe | Val | Arg | Ser | Asn | Phe | Leu | Val | Gly | Gly | Tyr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Phe | Val | Thr | Val | Gly | Val | Val | Phe | Tyr | Ile | Val | Lys | Phe | Gly | Ala | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val | Ser | Met | Asp | Thr | Leu | Arg | Ser | Arg | Gly | Trp | Val | Phe | Asp | Ala | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ser | Ser | Ser | Asn | Pro | Trp | Tyr | His | Phe | Tyr | Thr | Leu | Tyr | Gly | Gly |     |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |

<210> 43535

<211> 180

<212> PRT

<213> A.fumigatus

<400> 43535

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Ser | Tyr | Leu | Glu | Ala | Val | Val | Lys | Ile | Lys | Ala | Leu | Asn | Gly | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Gly | Tyr | Ile | Asn | Leu | Leu | Asp | Ala | Leu | Asn | Ala | Trp | Ala | Leu | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Glu | Leu | Lys | Gln | Ala | Leu | Gly | Tyr | Pro | Ala | Ala | Ala | Ser | Phe | Lys |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Val | Ser | Pro | Ala | Gly | Ala | Ala | Val | Gly | Val | Pro | Leu | Ser | Glu | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Arg | Lys | Val | Tyr | Met | Val | Asp | Asp | Ile | Ala | Gly | Ile | Glu | Thr | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly | Leu | Ala | Gln | Ala | Tyr | Ala | Arg | Ala | Arg | Gly | Ala | Asp | Arg | Met | Ser |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Phe | Gly | Asp | Leu | Leu | Ala | Leu | Ser | Asp | Val | Cys | Asp | Val | Pro | Thr |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Lys | Ile | Ile | Ser | Arg | Glu | Val | Ser | Asp | Gly | Val | Ile | Ala | Ala | Gly |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Tyr | Thr | Pro | Glu | Ala | Leu | Glu | Ile | Leu | Ser | Lys | Lys | Lys | Gly | Gly | Lys |
|     | 130 |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |

## 19651

Tyr Leu Val Leu Gln Met Asp Lys Asn Tyr Val Pro Ala Ser Glu Glu  
 145 150 155 160  
 Thr Arg Thr Ile Tyr Gly Val Gln Leu Ser Gln Gln Arg Asn Asp Val  
 165 170 175  
 Val Ile Ser Pro  
 180

&lt;210&gt; 43536

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (121)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43536

Ile Thr Leu Asn Ala Leu Pro Cys Ser Pro Val Val Lys Lys Met Tyr  
 1 5 10 15  
 Ile Leu Pro Asp Leu Ser Ser Met Gly Asn Glu Lys Asn Thr Pro Arg  
 20 25 30  
 Met Ile His Gln Leu Asn Thr Ile Pro Pro Phe Leu Asp Gln Ser Gly  
 35 40 45  
 Ala Gln Arg Thr Glu Leu Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 50 55 60  
 Lys Lys Lys Arg Thr Lys Ile Thr Ala Ile Gly Gln Phe Val Gln Lys  
 65 70 75 80  
 Gly Met Lys Lys Thr Asn His Lys Arg Thr Arg Pro Ala Pro Lys Thr  
 85 90 95  
 Val Asp Arg Ser Val Thr Ala Pro Thr Thr Thr Gly Ala Met Val Arg  
 100 105 110  
 Leu Gly Thr Val Arg Pro Ala Ala Xaa Pro Leu Glu Lys Val Glu Val  
 115 120 125  
 Pro Leu Leu Leu Leu Pro Leu Ala Lys Pro Tyr Pro Gly Ser Ala Val  
 130 135 140  
 Ala Val Asp Gly Val Pro Arg Ser Trp Leu Gln Val Pro Glu Lys Gln  
 145 150 155 160  
 Gly Pro Cys Gln Pro Pro Pro Val His Leu Leu Leu Gly Arg Ala Arg  
 165 170 175  
 Glu Trp Gln Lys Asn Leu Leu Gly Gln Val Pro Leu Gly Thr Phe Leu  
 180 185 190  
 Pro Gly Gln Gly Trp Ala His His Ser  
 195 200

&lt;210&gt; 43537

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (64)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43537

## 19652

```

Pro Arg Arg Phe Phe Cys His Ser Arg Ala Arg Pro Arg Ser Lys Trp
1           5           10           15
Thr Gly Gly Gly Trp Gln Gly Pro Cys Phe Ser Gly Thr Cys Ser Gln
          20           25           30
Asp Arg Gly Thr Pro Ser Thr Ala Thr Ala Glu Pro Gly Tyr Gly Phe
          35           40           45
Ala Asn Gly Ser Ser Ser Ser Gly Thr Ser Thr Phe Ser Lys Gly Xaa
          50           55           60
Ala Ala Gly Leu Thr Val Pro Ser Leu Thr Met Ala Pro Val Val Val
65           70           75           80
Gly Ala Val Thr Leu Leu Ser Thr Val Phe Gly Ala Gly Leu Val Leu
          85           90           95
Leu

```

&lt;210&gt; 43538

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (28), (48), (49), (61), (62), (170)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43538

```

Phe Gln Arg Glu Thr Arg Gln Thr Thr Lys Pro Thr Asn Glu Ser Ser
1           5           10           15
Ile Arg Thr Glu Tyr Lys Met Thr Gln Ser Ile Xaa Thr Thr Thr Gln
          20           25           30
Asp Gly Ile Thr Thr Ile Thr Ile Asn Arg Pro His Arg Arg Asn Xaa
          35           40           45
Xaa Asp Pro Pro Thr Ala Lys Ala Phe Tyr Asn Ala Xaa Xaa Ala Phe
          50           55           60
Asp Ala Asp Pro Ala Gln Lys Ile Cys Ile Leu Thr Gly Ala Gly Gly
65           70           75           80
Thr Phe Cys Ala Gly Ala Asp Leu His Ala Val Ala Ala Ala Gly Thr
          85           90           95
Gly Ser Ser Pro Ser Thr Leu Ser Thr Gln Glu Asn Leu Gln Pro Val
          100          105          110
Pro Val Ala Ser Gly Lys Asn Glu Gln Val Pro Ser Leu Gly Pro Met
          115          120          125
Gly Pro Thr Arg Leu His Leu Ser Lys Pro Leu Ile Ala Ala Ile Ala
          130          135          140
Gly His Ala Val Ala Gly Gly Leu Glu Leu Ala Gln Leu Ala Asp Leu
145          150          155          160
Arg Val Gly Ala Glu Asp Ala Val Cys Xaa Lys Gln Thr Ala Trp Lys
          165          170          175
Glu Ile Ile

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&lt;210&gt; 43539

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19653

&lt;400&gt; 43539

Val Pro Pro His Lys Thr Tyr Ile Cys Gly Glu Ser Ala Ile Val Thr  
 1 5 10 15  
 Arg Ser Ile Ala Pro Asp Cys Arg Leu Thr Thr Ser Thr Thr Ile Leu  
 20 25 30  
 Ser Tyr Pro Ile Pro Asp Pro Ala Asp Phe Met Asp Phe Ile Ser Glu  
 35 40 45  
 Ile Ser Ala Pro Ser Leu Ala Val Ala Ser Ala Leu Thr Val Ala Ala  
 50 55 60  
 Gly Ala Tyr Leu Asn Ala Lys Leu Ala Ile Ser Thr Asp Leu Thr Thr  
 65 70 75 80  
 Ile Cys Asn Asp Arg Asp Trp Thr Lys Arg Leu Gly Gln Arg Ile Ala  
 85 90 95  
 Glu Leu Gly Asp Thr Ala Thr Leu Tyr Lys Met Leu Glu Arg Val Val  
 100 105 110  
 Glu Val Gln Gly Arg Gly Asp Ser Glu Ala Leu Trp Phe Glu Asn Lys  
 115 120 125  
 Thr Trp Thr Tyr Arg Gln Leu Lys Asp Arg Ala Ser Gly Pro Tyr Cys  
 130 135 140  
 Tyr Lys His Val Leu Ser Pro Val Arg Asn  
 145 150

&lt;210&gt; 43540

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43540

Val Leu Arg Ile Gln Ser Thr Ala Asn Leu Ser Leu Leu Gln Thr Ser  
 1 5 10 15  
 Val Asp Leu Val Ala Ala Ala Val Val Thr Val Met Met Thr Asp  
 20 25 30  
 Val Asp Leu Thr Val Ala Ala Gly Val Ala Ala Val Val Thr  
 35 40 45  
 Thr Thr Val Met Val Val Met Thr Pro Thr Val Ile Val Val Thr Met  
 50 55 60  
 Ala Val Val Ala Met Ala Ala Ala Asn Thr Ala Thr Ile Leu Val Val  
 65 70 75 80  
 Ser Thr Val Thr Thr Thr Ala Thr Val Val Ala Leu Ile Ala Thr Pro  
 85 90 95  
 Pro Val Val Val Val Ala Val Lys Ser Gly Thr Val Ala Ser Leu Ala  
 100 105 110  
 Val Thr Ile Val Val Ala Ile Met Ile Val Met Leu Thr Leu Pro Ala  
 115 120 125  
 Thr Ala Thr Pro Leu Leu Pro Ala Asn Arg Thr Leu  
 130 135 140

&lt;210&gt; 43541

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43541

Ala Ser Val Arg Phe Ala Gly Arg Arg Gly Val Ala Val Ala Gly Arg  
 1 5 10 15  
 Val Ser Ile Thr Ile Ile Ile Ala Thr Thr Ile Val Thr Ala Arg Leu

## 19654

|             |                     |                     |                 |     |    |
|-------------|---------------------|---------------------|-----------------|-----|----|
|             | 20                  |                     | 25              |     | 30 |
| Ala Thr Val | Pro Leu Phe Thr     | Ala Thr Thr Thr Thr | Gly Gly Val Ala |     |    |
|             | 35                  | 40                  | 45              |     |    |
| Ile Asn Ala | Thr Thr Val Ala Val | Val Val Thr Val     | Leu Thr Thr Arg |     |    |
|             | 50                  | 55                  | 60              |     |    |
| Ile Val Ala | Val Phe Ala Ala     | Ile Ala Thr Thr     | Ala Ile Val Thr |     |    |
| 65          |                     | 70                  | 75              |     | 80 |
| Thr Ile Thr | Val Gly Val Ile     | Thr Thr Ile Thr     | Val Val Val Thr | Thr |    |
|             | 85                  | 90                  | 95              |     |    |
| Thr Ala Ala | Ala Thr Pro Ala     | Ala Thr Val Arg     | Ser Thr Ser Val | Ile |    |
|             | 100                 | 105                 | 110             |     |    |
| Ile Thr Val | Thr Thr Ala Ala     | Ala Thr Arg Ser     | Thr Glu Val Cys |     |    |
|             | 115                 | 120                 | 125             |     |    |
| Arg Arg Asp | Lys Leu Ala Val     | Asp                 |                 |     |    |
|             | 130                 | 135                 |                 |     |    |

&lt;210&gt; 43542

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43542

|             |             |             |             |             |     |
|-------------|-------------|-------------|-------------|-------------|-----|
| His His Asp | His Asn Ser | His Asp Asp | Arg His Gly | Glu Ala Arg | Asp |
| 1           | 5           | 10          | 15          |             |     |
| Cys Thr Ala | Leu His Gly | His His His | Tyr Arg Arg | Arg Ser Asp | Gln |
|             | 20          | 25          | 30          |             |     |
| Cys His His | Gly Ser Cys | Ser Arg His | Gly Thr His | Asp Glu Asp | Ser |
|             | 35          | 40          | 45          |             |     |
| Arg Gly Ile | Arg Gly Arg | His Arg Asp | His Arg His | Ser His Asp | Asp |
|             | 50          | 55          | 60          |             |     |
| His Cys Arg | Ser His Asn | Asp His Asn | Gly Ser Arg | His His His | Arg |
| 65          |             | 70          | 75          |             | 80  |
| Arg Arg Asp | Ala Ser Arg | His Arg Glu | Val His Val | Cys His His | Asn |
|             | 85          | 90          | 95          |             |     |
| Gly His His | Gly Arg Arg | Gly His Gln | Val His Gly | Ser Leu     |     |
|             | 100         | 105         | 110         |             |     |

&lt;210&gt; 43543

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (152)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43543

|             |             |             |             |             |     |
|-------------|-------------|-------------|-------------|-------------|-----|
| Ser Gly Met | Leu Xaa Glu | Arg Leu Gln | Gln Leu Thr | Tyr Gln Val | Gly |
| 1           | 5           | 10          | 15          |             |     |
| Ser Ser Ser | Pro Leu Pro | His Pro Phe | Asp Pro Leu | Ser Thr Lys | Glu |
|             | 20          | 25          | 30          |             |     |
| Ile Asp Ala | Ala Val Ala | Ile Ile Arg | Lys Glu His | Gly Asn Val | Asn |
|             | 35          | 40          | 45          |             |     |
| Phe Asn Ala | Val Thr Leu | Tyr Glu Pro | Arg Lys Ala | Glu Met Met | Ala |
|             | 50          | 55          | 60          |             |     |

## 19655

Trp Leu Ala Asp Pro Glu Asn Ala Pro Arg Pro Ala Arg Ala Ala Asp  
 65 70 75 80  
 Val Val Val Ile Ala Pro Gly Gly Lys Val Tyr Asp Gly Ile Val Asp  
 85 90 95  
 Leu Asp Gln Lys Lys Ile Val Ser Trp Lys His Thr Pro Gly Val Gln  
 100 105 110  
 Pro Leu Ile Thr Met Glu Asp Leu Gln Glu Val Glu His Ile Val Arg  
 115 120 125  
 Lys Asp Pro Lys Val Ile Glu Gln Cys Ala Ile Leu Gly Ile Pro Glu  
 130 135 140  
 Val Ala His His Gly Ala Glu Xaa Ser Arg Asp  
 145 150 155

&lt;210&gt; 43544

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43544

Pro Tyr Leu Ser Gly Val Phe Ala Gly Ser Leu Phe Trp Val Gly Val  
 1 5 10 15  
 Thr Tyr Ile Phe Ser Val Leu Pro Gly Arg Tyr Thr Leu Pro Arg Tyr  
 20 25 30  
 Cys Ser Val Leu Thr Val Tyr Ala Leu Ser Asn Leu Phe His Val Ala  
 35 40 45  
 Asn Phe Glu Tyr Ile Val Arg Gly Val Leu Leu Pro His Asn Ile Phe  
 50 55 60  
 Leu His Leu Leu Asp Asp Arg Arg Pro Arg Leu Cys Ser Glu Asp Gly  
 65 70 75 80

&lt;210&gt; 43545

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43545

Cys Ser Ser Thr Ser Tyr Pro Phe Pro Phe Thr Met Ala Glu Phe Ser  
 1 5 10 15  
 Thr Ser Glu Asp Leu Phe Ala His Ala Arg Gly Asn Glu Ser Asn Glu  
 20 25 30  
 Arg Phe Tyr Asn Leu Cys Phe Trp Gly Arg Asn Asn Pro Pro Ser Ala  
 35 40 45  
 Met Pro Cys Ser Gln Tyr Thr Thr Gln Phe Ile Ser Ser Arg Gly Asn  
 50 55 60  
 Glu Tyr Phe Cys Glu Ile Asp Glu Glu Tyr Leu Thr Asp Arg  
 65 70 75

&lt;210&gt; 43546

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43546

Tyr Tyr Ala Arg Met Ser Ala Ser Ser Ile Leu Asp Lys Pro Leu Leu  
 1 5 10 15  
 Lys Val Ser Arg Pro Val Ala Ala Cys Ser Arg Cys Arg Thr Ala Lys

## 19656

20 25 30  
 Ile Lys Cys Asp Gly Lys Leu Pro Ala Cys Ser Ala Cys Glu Arg Val  
 35 40 45  
 Trp Lys Ala Ser Thr Cys Ser Gly Ala Ser Asp Glu Phe Ala Arg Gly  
 50 55 60  
 Lys  
 65

&lt;210&gt; 43547

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (139), (148), (153), (155), (156)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43547

Lys Ser Val Ser Met Ser Lys His Asn Leu Thr Asp Thr Thr Val Ile  
 1 5 10 15  
 His Arg Gly Gln Tyr Lys Tyr Arg Lys Tyr Ser His Ser Asn Ile Pro  
 20 25 30  
 Ile Ser His Leu Ser Pro Leu Pro Arg Gln Gln Pro Leu Pro Leu Pro  
 35 40 45  
 Leu His Pro Leu Asn His Leu Ala Arg Arg Pro Ile Thr Gln Pro Lys  
 50 55 60  
 His Arg His Ser Arg His Arg Ser Gln Gln Pro Lys Ser Pro Arg His  
 65 70 75 80  
 Arg Ile Pro Pro Lys Leu Ile Leu Asn Lys Pro Thr Pro Lys Arg Thr  
 85 90 95  
 Gln Glu His Pro His Lys Arg Gly His Ser Leu Asp Ala Glu Arg Leu  
 100 105 110  
 Arg His Gly Pro Ser Phe Ala Glu Asp Pro Arg Pro Arg Ala Leu His  
 115 120 125  
 Phe Leu Glu Asp Leu Leu Arg Phe Asp Val Xaa Arg Gly His Ala Ser  
 130 135 140  
 Val Asp Lys Xaa Ala Asp Lys Gly Xaa Gly Xaa Xaa  
 145 150 155

&lt;210&gt; 43548

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (12), (202), (224)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43548

Asp Thr Leu Ser Ser Glu Pro Ala Gly Glu Asp Xaa Arg Val Ser Leu  
 1 5 10 15  
 Gln Ser His Asp Asp Ile Thr Tyr Glu Ser Ile Ala Lys Ala Phe Asn  
 20 25 30  
 Leu Pro Leu Lys Leu His Thr Arg Ala Phe Glu Arg Met Lys Arg Leu



## 19657

```

      35              40              45
Ser Lys Pro His Pro Met Gln Pro His Phe Asp Trp Asp Thr Pro Ser
  50              55              60
Pro Gly Leu Thr Ala Lys Leu Arg Met Val Tyr Leu Pro Tyr Asp Glu
  65              70              75              80
Asn Leu Pro Ala Glu Ser Gln Ala Leu Phe Val Ala Asp Asp Met Trp
      85              90              95
Val Pro Ile Ala Val Val Asn Gly Asn Val His Ile Leu Pro Gly Val
      100              105              110
Pro Arg Leu Phe Glu Arg Leu Leu Glu His Leu Lys Pro Val Leu Leu
      115              120              125
Pro Arg Leu Ala Asn Pro Glu Gly Lys Gly Ile Tyr Arg Tyr Leu Phe
      130              135              140
Ser Thr Pro Leu Pro Glu Ser Ala Val Ala Pro Tyr Leu Thr Asp Leu
      145              150              155              160
Ala Ala Arg Ala Ser Val His Gly Val Lys Val Gly Ser Tyr Pro Arg
      165              170              175
Trp Gly Asn Lys Arg Asn Thr Val Thr Leu Val Gly Lys Asp Lys Ala
      180              185              190
Phe Met Asp Ser Val Ile Ala Asp Val Xaa Glu Asn Val Gln Gly Lys
      195              200              205
Lys Val Ser Arg Asp Asp Glu Leu Asp Pro Pro Ser Glu Ser Glu Xaa
      210              215              220
Ser Ser Asn Asp Ser Leu Cys Ser Phe Thr Gly Lys Ile Phe Cys Val
      225              230              235              240
Phe Asn Leu Leu Thr Asp Arg
      245

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&lt;210&gt; 43549

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (170)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43549

```

Glu Met Ser Ser Asn Asp Pro His Leu Pro Pro Ser Asp Ile Ala Ser
  1              5              10              15
Pro Gly Ile Lys Asp Glu Ala Ala Ser Val Thr Leu Gly Ser Leu Gln
      20              25              30
Glu Pro Gln Gln Gln Ser Gln Thr Pro Ala Gly Ser Phe Ser Glu Pro
      35              40              45
Val Glu Asn Ala Ala Val Pro Ala Thr Gln Ser Gly Ala Val Asn Thr
      50              55              60
Gln Lys Tyr Asp Asn Ala Asp Ser Thr Gln Ala Ala Gly Val His Asp
      65              70              75              80
Ser Ser Thr Pro Ile Val Ala Ala Glu Gln Ser Ile Arg Asp Thr Phe
      85              90              95
Ala Thr Asn Asp Lys Pro Gln Asp Thr Thr Gly Leu Glu Ser Thr Asp
      100              105              110
Thr Pro Val Pro Glu Pro Leu Pro Asp Ala Ser Asp Ala Ala Ala Lys
      115              120              125
Glu Val Glu Gly Ser Ala Pro Ser Leu Thr Ile Thr Leu Leu Leu Thr

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## 19658

130 135 140  
 Thr Gly Ser Arg His Pro Phe Glu Ile Asp Gly Lys Tyr Leu Gln Lys  
 145 150 155 160  
 Arg Gly Ser Thr Ser Arg Val Leu Ile Xaa Gly Gly Trp Asp Arg His  
 165 170 175  
 Ser Met Asp

&lt;210&gt; 43550

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43550

Tyr Leu Cys Ala Asp Pro Ala Ser Pro Val Val Lys Thr Ile Asp Met  
 1 5 10 15  
 Lys Val Thr Arg Asp Ser Glu Ser Gly Ile Asp Ile Asp Leu His Asp  
 20 25 30  
 Arg Ser Glu Leu Ser Glu Val Asp Leu Ala Ile Val Arg Ile Asp Pro  
 35 40 45  
 Val Thr Tyr Leu Pro Pro Glu Ile Met Ser Leu Thr Leu Ser Tyr Leu  
 50 55 60  
 Asp Pro Glu Ser Leu Met Gln Ala Glu Leu Val Ser Arg Ala Trp Arg  
 65 70 75 80  
 Glu Gln Ala Ser Ser Arg His Thr Trp Arg Gln Val Phe Arg Arg Ala  
 85 90 95  
 Tyr Gly His Arg His Pro Ser Gly Val Ala Ser Lys Lys Arg Gln Ser  
 100 105 110  
 Ala Gly Leu Gly Lys Ser Ile Pro Asn Gln Glu Trp Lys Lys Met Phe  
 115 120 125  
 Leu Val Arg Arg Ala Leu Asp His Arg Trp Lys Glu Gly Lys Ala Ala  
 130 135 140  
 Ala Ile Tyr Leu His Gly His Thr Asp Ser Val Tyr Cys Val Gln Phe  
 145 150 155 160  
 Asp Glu

&lt;210&gt; 43551

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43551

Arg Val Ser Phe Gln Pro Arg Gly Glu Asp Leu Gln Gln Phe Tyr Arg  
 1 5 10 15  
 Glu Ser Arg Leu His His Leu Ser Thr Trp Lys Ala Glu Leu Lys Ala  
 20 25 30  
 Gln Leu Gln Ala Ala Ala Lys Glu Lys Ser His Ser Gln Ala Gly Arg  
 35 40 45  
 Lys Lys Pro Ala Pro Gly Ala Arg Arg Tyr Val Leu His Val Asp Phe  
 50 55 60  
 Asp Ser Phe Phe Ala Ala Val Ser Met Leu Lys His Pro Glu Leu Lys  
 65 70 75 80  
 Gly Gln Pro Val Ala Ile Ala His Gly Thr Gly Ser Gly Ser Glu Ile  
 85 90 95  
 Ala Ser Cys Asn Tyr Pro Ala Arg Ala Arg Gly Ile Arg Asn Gly Met

## 19659

```

      100              105              110
Trp Met Lys Gly Ala Leu Gln Ala Cys Pro Glu Leu Lys Val Leu Pro
      115              120              125
Tyr Asp Phe Pro Ala Tyr Glu Glu Ala Ser Lys Lys Phe Tyr Ser Ala
      130              135              140
Val Leu Ala Val Asp Gly Val Val Gln Ser Val Ser Ile Asp Glu Ala
      145              150              155              160
Leu Val Asp Ile Thr Leu Gln Cys Leu Glu Ala Gly Gly Ser Asp Gly
      165              170              175
Arg Gly Ile Ser Glu Arg Ser Ile Tyr
      180              185

```

&lt;210&gt; 43552

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43552

```

Leu His Leu Pro Ser Glu Gln Val Ser Ser Ser Asn Pro Leu Val Lys
1              5              10              15
Pro Lys Pro Thr Pro Gly Tyr Ile Tyr Leu Tyr Ser Glu Asp Glu Leu
      20              25              30
Val His Phe Cys Trp Arg Pro Arg Thr Ala Pro Pro Asp Gln Pro Glu
      35              40              45
Leu Asp Leu Val Met Val Pro Ser Asp Gly Thr Phe Thr Pro Tyr Gln
      50              55              60
Pro Ala Gly Lys Asp Ala Pro Thr Asn Gly Arg Ile Phe Val Leu Lys
      65              70              75              80
Phe Ser Ser Ser Ser Gln Arg Tyr Leu Phe Trp Leu Gln Ser Lys Ser
      85              90              95
Gln His Glu Arg Gly Asp Pro Ser Trp Phe Ser Pro Ile Phe Thr Thr
      100              105              110
Gly Leu Glu Gly Asn Ala Tyr Gly Glu
      115              120

```

&lt;210&gt; 43553

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (25)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43553

```

Thr Phe Ala Met Ser Ile Ala Pro Leu Ile Thr Phe Lys Ala Gly Ile
1              5              10              15
Cys Asp Leu Asp Val Ser Asp Cys Xaa Tyr Ser Pro Asp Lys Leu Thr
      20              25              30
Leu Thr Ser Val Tyr Gln Thr Ala Thr Ile Arg Pro Asp Asn Arg Phe
      35              40              45
Met Ala Leu Thr Asn Ser Thr Phe Pro Leu Ser Arg Cys Gln Val Pro
      50              55              60
Ile His
65

```

19660

<210> 43554  
 <211> 205  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (194), (195), (196), (197), (198), (199), (200), (201), (202), (203), (204)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43554  
 Gly Lys Tyr Asp Ala Asn Ala Asn Gln Trp Ile Met Gly Leu Asn Ala  
 1 5 10 15  
 Ala Leu Lys Asp Trp Lys Arg Gln Thr Lys Tyr Phe Gly His Leu Asn  
 20 25 30  
 Gly Ser Lys Tyr Ser Cys Leu Val Phe Asp Asn Arg Gly Val Gly Arg  
 35 40 45  
 Ser Asp Lys Pro Thr Cys Phe Tyr Ser Thr Ser Glu Met Ala Arg Asp  
 50 55 60  
 Val Val Asp Leu Val Ser Ser Leu Gly Trp Ile Asp Met Lys Ala Pro  
 65 70 75 80  
 Ala Thr Arg Ala Ile His Val Ile Gly Ala Ser Met Gly Gly Met Ile  
 85 90 95  
 Ala Gln Glu Val Ala Met Leu Ile Pro Asp Arg Leu Ala Ser Leu Thr  
 100 105 110  
 Leu Cys Cys Thr Ala Pro Arg Leu Val Arg Thr Thr Pro Phe Phe Glu  
 115 120 125  
 Asn Leu Gln Gln Arg Ala Ser Met Phe Ile Pro Arg His Val Asp Val  
 130 135 140  
 Glu Ile Asp Arg Ile Ala Ala Thr Leu Phe Ala Ser Glu Phe Leu Ala  
 145 150 155 160  
 Gln Pro Asp Thr Glu Asn Glu Asp Pro Ala Leu Asn Phe Pro Thr Lys  
 165 170 175  
 Arg Asp Arg Phe Ala Ala Gly His Leu Arg Lys Lys Ala Asp Thr Glu  
 180 185 190  
 Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gln  
 195 200 205

<210> 43555  
 <211> 183  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (110), (166), (179)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43555  
 Pro Ser Ser Pro Gly Gly Val Arg Arg Asn Thr Trp His Leu Pro Leu  
 1 5 10 15  
 Trp Arg Lys Cys Ile Ile Leu Val Val Val Ser Trp Met Ala Phe Val  
 20 25 30  
 Val Thr Phe Ser Ser Thr Ser Leu Leu Pro Ala Thr Pro Glu Ile Ala  
 35 40 45

## 19661

Ala Glu Phe Asp Thr Thr Pro Glu Ile Leu Asn Ile Ile Asn Ala Gly  
 50 55 60  
 Val Leu Leu Ala Met Gly Phe Ser Ser Leu Ile Trp Gly Pro Phe Thr  
 65 70 75 80  
 Ala Leu Leu Gly Arg Arg Val Ala Tyr Asn Ile Ala Ile Ala Ala Leu  
 85 90 95  
 Cys Gly Cys Ser Val Gly Thr Ala Leu Ala Gly Gly Ser Xaa Val Phe  
 100 105 110  
 Ala Val Phe Arg Val Leu Gly Gly Leu Thr Gly Thr Ser Phe Met Val  
 115 120 125  
 Gln Gly Gln Thr Ile Leu Ala Asp Ile Phe Glu Ala Val Cys Met Ile  
 130 135 140  
 Val Tyr Leu Ser Gly Cys Val Cys Val Cys Glu Cys Asp Lys Ala Asp  
 145 150 155 160  
 Cys Gly Val Lys Gly Xaa Gly Asp Gly Gly Trp Val Leu His Gly Trp  
 165 170 175  
 Asp Gly Xaa Gly Ala Gly Asp  
 180

&lt;210&gt; 43556

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (18), (74)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43556

Ile Ala Gly Pro Xaa Thr Val Pro Ala Met Lys Asn Pro Thr Ala Val  
 1 5 10 15  
 Pro Xaa Thr Phe Tyr Thr Thr Ile Ser Phe Ile Thr Leu Thr His Ala  
 20 25 30  
 His Thr Ala Arg Glu Ile Asn Asp His Thr Tyr Arg Leu Lys Asn Ile  
 35 40 45  
 Arg Gln Asp Ser Leu Pro Leu His His Lys Arg Arg Pro Arg Gln Pro  
 50 55 60  
 Pro Lys His Pro Lys His Arg Lys His Xaa Thr Pro Pro Arg Lys Arg  
 65 70 75 80  
 Arg Ala His Arg Thr Pro Ala Lys Arg Arg Asn Arg Asn Ile Ile Arg  
 85 90 95  
 Asn Pro Pro Pro Lys Lys Arg Ser Glu Gly Ala Pro Asn Lys Arg Arg  
 100 105 110  
 Glu Ala His Gly Gln Gln His Pro Gly Val Asp Asp Ile Gln Tyr Phe  
 115 120 125  
 Gly Gly Cys Val Glu Leu Gly Cys Asp Phe Gly Gly Cys Gly Glu Glu  
 130 135 140  
 Arg Arg Ala Gly Glu Gly Asp His Glu Ser His Pro Ala Asp Asp Asp  
 145 150 155 160  
 Glu Asp Asp Ala Phe Ala Pro Glu Trp Glu Met Pro Cys Ile Ser Ser  
 165 170 175  
 Tyr Thr Thr Gly Ala Gly Arg Ser Arg Val Arg Gln  
 180 185

&lt;210&gt; 43557

19662

<211> 112  
 <212> PRT  
 <213> A.fumigatus

<400> 43557  
 Pro Ile Gly Gly His Gly Ser Asn Lys Ala Leu Leu Glu Ile Phe Gly  
 1 5 10 15  
 Lys Asn Gly Pro Phe Thr Ala Cys Lys Gly Cys Arg Asn Ile Tyr Thr  
 20 25 30  
 Lys Leu Ala Ile Ala Ile Tyr Ile Asp His Gly Lys Val Gly Glu Arg  
 35 40 45  
 Ala Val Gly Cys Pro Trp His Trp Ala Val Ala Leu Leu Trp Glu Ile  
 50 55 60  
 Lys Leu Val Asp Cys Pro Ile Val Ala Thr Lys Arg Tyr Ala Tyr Arg  
 65 70 75 80  
 Trp Pro Leu Leu Ala Arg His Ala Ile Ile Gly Gln Gln Leu Met Met  
 85 90 95  
 Leu Leu Gly Ser Trp Leu Gly Cys Trp Ile His Cys Ala Asn Arg Pro  
 100 105 110

<210> 43558  
 <211> 180  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (123)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43558  
 Arg Ser Gln Leu Ser Gly Asp Asn Ala Glu Ala Phe Asn Ser Ala Thr  
 1 5 10 15  
 Arg Pro Leu Ser Gln Ser Ile Ala Val Gln Thr Asp Ala Thr Asp Pro  
 20 25 30  
 Phe Val Ala Ser Thr Glu Pro Ala Pro Ala Pro Glu Pro Lys Arg Glu  
 35 40 45  
 Val Val Thr Tyr Ser Lys Gly Val Gln Thr Asp Asp Ser Lys Gln Arg  
 50 55 60  
 Gln Thr Asp Ser Leu Asp Ser Glu Ser Glu Thr Gly Glu Phe Asp Asp  
 65 70 75 80  
 Gly Thr Gly Pro Ser Lys Arg Leu Ser Lys Ser Asp Arg Glu His Asp  
 85 90 95  
 Glu Glu Ile Arg Arg Lys Leu Arg Arg Glu Ile Glu Glu Glu Leu Gln  
 100 105 110  
 Ala Thr Gln Gln Gln Ala Ala Gly Gly Pro Xaa Ala Gln Ala Thr Asn  
 115 120 125  
 Leu Arg Tyr Pro Leu Arg Thr Leu Asp Glu Asp Glu Leu Lys Ala Val  
 130 135 140  
 Thr Ser Ser Glu Asp Phe Leu Asp Phe Val Glu Arg Ser Ala Lys Val  
 145 150 155 160  
 Ile Glu Arg Ala Leu Asn Glu Glu Tyr Asp Val Leu Ala Asp Tyr Glu  
 165 170 175  
 Leu Gly Gly Val  
 180

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<210> 43559  
<211> 135  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (6)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43559  
Tyr Ser Leu Ala Arg Xaa Val Arg Pro Leu Trp Leu Lys Met Leu Ile  
1 5 10 15  
Thr Cys Val Leu Gly Ile Ile Thr Tyr Trp Trp Met Val Asp Phe Pro  
20 25 30  
Glu Gln Ser His Arg Ser Phe Cys Phe Leu Ser Lys Ile Glu Ala Lys  
35 40 45  
Val Ala Ala Gln Arg Ile Gln Ile Asp Arg Asp Asp Val Val Pro Glu  
50 55 60  
Pro Phe Ser Trp Arg Lys Ile Leu Val Asn Phe Leu Asp Pro Lys Leu  
65 70 75 80  
Tyr Gly Phe Ala Cys Leu Phe Phe Leu Leu Asn Leu Val Ser Thr Ser  
85 90 95  
Leu Asn Tyr Phe Leu Pro Ile Ile Leu Gln Ser Gly Met Gly Phe Ser  
100 105 110  
Ser Ser Gln Ser Ile Leu Leu Ser Thr Pro Val Ser Ser Ala Cys His  
115 120 125  
Glu Val His Asp Tyr Pro Thr  
130 135

<210> 43560  
<211> 146  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (138)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43560  
Lys Leu Arg Glu Leu Lys Arg Ile Lys Arg Glu Arg Glu Ala Ile Glu  
1 5 10 15  
Ala Ala Glu Lys Glu Arg Glu Glu Ile Glu Arg Arg Arg Asn Leu Thr  
20 25 30  
Ala Glu Glu Arg Glu Arg Glu Asp Arg Glu Phe Ile Glu Lys Gln Lys  
35 40 45  
Gln Glu Lys Glu Ala Ser Arg Gly Gln Thr Gly Phe Met Gln Arg Tyr  
50 55 60  
Phe His Lys Gly Ala Phe Phe Arg Asp Asp Leu Glu Arg Glu Gly Leu  
65 70 75 80  
Asp Lys Arg Asn Ile Met Gly Gln Arg Phe Ala Asp Asp Val Ala Arg  
85 90 95  
Glu Thr Leu Pro Glu Tyr Met Gln Ile Arg Asp Met Thr Lys Leu Gly  
100 105 110  
Lys Lys Gly Arg Thr Arg Tyr Lys Asp Leu Arg Thr Glu Asp Thr Gly

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115                      120                      125  
 Arg Phe Gly Glu Gly Phe Val Phe Thr Xaa Trp Pro Trp Thr Asp Gln  
      130                      135                      140  
 Ser Ser  
 145

<210> 43561  
 <211> 209  
 <212> PRT  
 <213> A.fumigatus

<400> 43561  
 Gly Ala Arg Phe Leu Pro Ala Ser Gly Val Ile Met Ile Ser Pro Leu  
 1                      5                      10                      15  
 Val Arg Ala Leu Glu Pro Ile Ser Asn Phe Thr Val Asp Thr Gln Val  
                     20                      25                      30  
 Gln Leu Tyr Ala Thr Phe Ser Pro Thr Ala Pro Lys Pro Glu Tyr Asp  
                     35                      40                      45  
 Glu Ala Leu Ala Ala Trp Thr Leu Lys Lys Glu Asp Leu Ser Ala Phe  
                     50                      55                      60  
 Ile Asn Ala Ala Glu Trp Pro Leu Ser Pro Ser Ile Gly Asn Gly Pro  
 65                      70                      75                      80  
 Thr Ile Asn Phe Ile Leu Tyr Val Pro Ala Pro Ser Gln Ser Pro Met  
                     85                      90                      95  
 Val Val Lys Glu Ser Gly Ala Thr Ser Trp Ile Ile Pro Gln Trp Gly  
                     100                      105                      110  
 Gly Val Phe Leu Val Asn Pro Pro Leu Ser Thr Thr Gln Glu Asn His  
                     115                      120                      125  
 Ser Ser Pro Thr His Leu Ser Lys Asp Ala Leu Arg Ala Gly Phe Leu  
                     130                      135                      140  
 Thr Phe Ser His Gln Leu Leu Thr Leu Leu Gly Val Pro Thr Thr Pro  
 145                      150                      155                      160  
 Thr Ser Leu Pro Phe Arg Leu Gln Thr Leu Ile Arg Val Arg Ala Ala  
                     165                      170                      175  
 Thr Leu Leu Leu Ser Ala Ser Ser Thr Met Gly Ser Leu Ala Arg Leu  
                     180                      185                      190  
 Thr Glu Ser Ile Pro Ser Ile Pro Ile Pro Ala Asn Val Ala Ala Ser  
                     195                      200                      205  
 Val

<210> 43562  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus  
  
 <220>  
 <221> UNSURE  
 <222> (82)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43562  
 Thr Asn Thr Tyr Asp Ser Val Ser Glu Leu Asp Ala Ser Cys Leu Glu  
 1                      5                      10                      15  
 Leu Thr Pro Glu Cys Ile Lys Gln Ala Gln Asp Thr Lys Thr Pro Glu  
                     20                      25                      30



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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Val | Lys | Gln | Phe | Phe | Arg | Asp | Tyr | Gly | Glu | Ile | Ser | Asp | His | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gln | Pro | Thr | Pro | Met | Lys | His | Ser | Glu | Thr | Val | Phe | Ala | Ala | Thr | Arg |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Leu | Arg | Ser | Thr | Arg | Ser | Leu | Thr | Thr | Thr | Glu | Lys | Gln | Asp | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Xaa | Thr | Lys | Tyr | Glu | Asp | Ser | Arg | Gly | Asp | Ser | Thr |     |     |     |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     |     |

<210> 43563

<211> 117

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (108)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43563

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ser | Leu | Leu | Asp | Leu | Leu | Ile | Gln | Ala | Gly | Leu | Arg | Ser | Lys | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Val | Glu | Arg | Glu | Thr | Met | Trp | Leu | Ala | Tyr | Arg | Ile | Phe | Met | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn | Phe | Pro | Gly | Val | His | Thr | Ser | Gly | Ile | Ser | Ala | Thr | Ser | Ala | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Leu | Asp | Ile | Leu | Ser | Tyr | Pro | Thr | Glu | Glu | Gly | Leu | Met | Asp | Met | Leu |
| 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gln | Ala | Glu | Ile | Glu | Gln | Ile | Ala | Ala | Asn | Ser | Asp | Gly | Ser | Trp | Ser |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ala | Ala | Asp | Leu | Glu | Arg | Ala | Ser | Leu | Leu | Glu | Ser | Ala | Ile | Lys | Glu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ser | Leu | Arg | Phe | Asp | Gly | Ile | Asn | Ala | Leu | Cys | Xaa | Arg | Asp | Arg | Ala |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Trp | Lys | Tyr | Ser | Ile |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 115 |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43564

<211> 181

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (20)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43564

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Gly | Thr | Ile | Lys | Pro | Thr | Met | Pro | Tyr | Leu | Val | Gly | Ile | Arg | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Leu | Thr | Xaa | Tyr | Val | Glu | Leu | Leu | Thr | Trp | Thr | Asn | Val | Glu | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Pro | Asp | Pro | Glu | Leu | Ala | Lys | Arg | Arg | Asp | Leu | Arg | Arg | Ser | Arg |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Lys | Lys | Arg | Gly | Val | Thr | Leu | Tyr | Glu | Cys | Leu | Asp | Glu | Phe | Asn | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

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Glu Glu Ile Leu Ser Glu Asn Asp Ala Trp Tyr Cys Pro Arg Cys Lys  
 65 70 75 80  
 Glu His Arg Arg Ala Ser Lys Lys Phe Glu Leu Trp Lys Thr Pro Asp  
 85 90 95  
 Ile Leu Val Met His Leu Lys Arg Phe Ser Ala Ser Arg Gly Phe Arg  
 100 105 110  
 Asp Lys Leu Asp Val Leu Val Asp Phe Pro Val Glu Gly Leu Asp Met  
 115 120 125  
 Ser Gly Arg Val Glu Ser Pro Glu Glu Gly Lys Ser Leu Ile Tyr Asp  
 130 135 140  
 Leu Phe Ala Val Asp Asn His Tyr Gly Gly Leu Gly Gly Gly His Tyr  
 145 150 155 160  
 Thr Ala Tyr Ala Lys Asn Phe Met Ser Gly Gln Trp Asn Glu Tyr Asn  
 165 170 175  
 Gly Lys Ser Phe Leu  
 180

&lt;210&gt; 43565

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43565

Asp Glu Val His Pro Ala Ile Val Gly Ile Ser Arg Ile Trp Thr Ser  
 1 5 10 15  
 Gly Ser Ser Arg Arg Arg Gly Ile Ala Met Asp Leu Leu Asp Cys Val  
 20 25 30  
 Val Thr Asn Phe Ile Tyr Gly Met Glu Ile Pro Lys Glu Gln Val Ala  
 35 40 45  
 Phe Ser Gln Pro Thr Glu Ser Gly Lys Arg Leu Ala Gln Ala Phe Phe  
 50 55 60  
 Gly Pro Gly Val Gln Trp His Val Tyr Asn Glu Ser  
 65 70 75

&lt;210&gt; 43566

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43566

Leu Leu Ser Ser Glu Val Asp Phe Ala Asp Thr Asn Pro Leu Leu Lys  
 1 5 10 15  
 Arg Pro Ala Glu Thr Glu His Ala Phe Asp Thr Asp Lys Asn Gln Lys  
 20 25 30  
 Pro Ala Pro Ala Arg Pro Ser Ile Asn Gly Lys Ser His Asn Trp Phe  
 35 40 45  
 Ala Arg Val Phe Gln Ile Lys Pro Ala Thr Arg Val Val Ala Leu Asn  
 50 55 60  
 Thr Ser Lys Leu Lys Gly Arg Lys Asp Val Leu Lys Leu Leu Arg Glu  
 65 70 75 80  
 Trp Lys Gln Phe Gly Met Glu Glu Ala Tyr Leu Asp Lys Ala Asn Gly  
 85 90 95  
 Val Ile Arg Ala Lys Val Gly Glu Val Asn Cys Lys Ser Glu Pro Gly  
 100 105 110

&lt;210&gt; 43567

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<211> 69  
<212> PRT  
<213> A.fumigatus

<400> 43567  
His Glu Cys Leu Ser Pro Ala Val Arg Arg Ser Asn Gly Ile Leu Ala  
1 5 10 15  
Ile Phe Arg Ala Thr Ser Ser Arg Gly Thr Ser Thr Lys His Gln Val  
20 25 30  
Ser Val Glu Met Lys Tyr Val Gln Leu Gly Ser Ser Gly Leu Arg Val  
35 40 45  
Ser Pro Ile Cys Val Gly Cys Met Ser Tyr Arg Ser Pro Glu Lys Arg  
50 55 60  
Phe Asp Trp Ala Leu  
65

<210> 43568  
<211> 86  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (1), (2)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43568  
Xaa Xaa Ser Ser Leu Lys Ser Val Ile Leu Ala Trp Phe Leu Phe Trp  
1 5 10 15  
Pro Gly Val Leu Ile Asn Ile Ile Val Gly Ala Glu Val Pro His Val  
20 25 30  
Thr Gly Gln Ala Tyr Leu Asp Asp Lys Thr Val Trp Arg Thr Trp Asn  
35 40 45  
Asn Gln Thr Gly Trp Ser Ser Asn Gly Leu Phe Phe Val Ala Gly Met  
50 55 60  
Leu Asn Gly Ala Tyr Ser Val Gly Thr Pro Asp Cys Phe Ser His Leu  
65 70 75 80  
Ala Glu Glu Ile Pro Arg  
85

<210> 43569  
<211> 170  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (8)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43569  
Tyr Arg Pro Ser Arg Asn Ile Xaa Lys Ala Val Leu Ala Gln Met Ser  
1 5 10 15  
Val Gly Phe Val Thr Gly Leu Leu Tyr Met Ile Ala Val Phe Tyr Ser  
20 25 30  
Ile Asn Asp Leu Asp Leu Val Met Ser Asn Pro Tyr Gly Phe Pro Leu

[illegible]

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<210> 43570
<211> 80
<212> PRT
<213> A.fumigatus
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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Thr | Trp | Ile | Arg | Ser | Ser | Lys | Thr | Ser | Glu | Ile | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Leu | Val | Lys | Ser | Lys | Arg | Ala | Asn | Ala | Thr | Leu | Leu | Ser | Leu | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn | Ile | Phe | Ser | Lys | Leu | Pro | Asn | Ile | Gln | Gln | Asp | His | Gln | Gly | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Phe | Ser | Asp | Ser | Pro | Leu | Ser | Ser | Gln | Thr | Ala | Glu | Leu | Ala | Asp | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Leu | Ser | Ile | Lys | Ser | Met | Thr | Gln | Arg | Tyr | Met | Ser | Ile | Trp | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |

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<211> 70
<212> PRT
<213> A.fumigatus
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[illegible]

```
<211> 108
<212> PRT
<213> A.fumigatus
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&lt;400&gt; 43572

```

Asn Ile Pro Asp Glu Trp Leu Ser Ala Ala Met Asp Ala His Glu Leu
1           5           10           15
Ser Phe Arg Asp Gly His Gly Ser Ser Thr Ser Thr Met Lys Asp Gly
           20           25           30
Cys Ala Ser Ala Glu Lys Pro His Tyr Leu Pro Gly Asp Ser Ser Phe
           35           40           45
Thr Ser Val Phe Gly Pro Ser Glu Thr Val Glu Asp Val Glu Thr Glu
           50           55           60
Pro Gly Ser Thr Gln Asp Lys Pro His Ser Phe Asn Thr Gln Lys Pro
65           70           75           80
Ile Arg Glu Asn Leu Ala Gly Lys Asn Val Ala Pro Phe Leu Ala Arg
           85           90           95
His Ile Pro Glu Gln Tyr Ala Pro Leu Gly Ser Gln
           100           105

```

&lt;210&gt; 43573

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (26), (35), (37), (39), (79), (80), (83), (84), (140)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43573

```

Glu Arg Gly Glu Gln Asn Gln Gly Arg Arg Gly Lys Gln Glu Glu Glu
1           5           10           15
Gly Arg Ala Glu Thr Gly Glu Arg Gln Xaa Glu Arg Gly Lys Lys His
           20           25           30
Thr Asp Xaa Gly Xaa Glu Xaa Thr Lys Arg Gly Gly Glu Glu Asn Lys
           35           40           45
Glu Gln Arg Arg Ala Glu Lys Glu Thr Lys Glu Gly Arg Glu Pro Lys
           50           55           60
Gly Arg Arg Arg Lys Pro Pro Thr Gln Asn Gly Glu Arg Gly Xaa Xaa
65           70           75           80
Glu Glu Xaa Xaa Gly His Leu Pro Ile Gln Thr Pro His Ser Arg Val
           85           90           95
Cys Gln Pro Ala Pro Phe His Pro Ser Tyr Leu His Trp His Ser Ile
           100           105           110
Arg His Pro Glu Ala Tyr Ile Asp Thr Ser Asp Thr Leu Leu His Thr
           115           120           125
Arg Asn Lys Pro Ser Asn Thr Tyr Pro Gln His Xaa Thr Pro Leu Gln
           130           135           140
Arg Asn Ala Phe Ala Ile Ala Thr Pro Thr Leu His Arg Ile Ser Trp
145           150           155           160
Leu Val

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&lt;210&gt; 43574

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19670

<220>

<221> UNSURE

<222> (26), (36), (38), (39), (79), (81), (83), (85), (141)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43574

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Arg | Gly | Gly | Asn | Arg | Thr | Lys | Gly | Asp | Gly | Gly | Ser | Arg | Lys | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Glu | Glu | Arg | Lys | Pro | Gly | Asn | Gly | Xaa | Ala | Arg | Glu | Gly | Lys | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Pro | Thr | Xaa | Glu | Xaa | Xaa | Arg | Arg | Lys | Glu | Gly | Gly | Arg | Arg | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Ser | Lys | Glu | Glu | Arg | Arg | Lys | Lys | Arg | Lys | Lys | Ala | Glu | Asn | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Gly | Glu | Glu | Gly | Asn | His | Pro | His | Arg | Thr | Gly | Lys | Glu | Xaa | Ala |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Xaa | Lys | Xaa | Gly | Xaa | Asp | Thr | Phe | Pro | Phe | Lys | Leu | Pro | Ile | Pro | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe | Val | Asn | Gln | Pro | Leu | Phe | Ile | His | Pro | Thr | Phe | Ile | Gly | Ile | Pro |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Ala | Ile | Leu | Arg | Pro | Ile | Leu | Ile | Leu | Pro | Ile | Pro | Phe | Phe | Thr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Pro | Ala | Ile | Asn | Leu | Gln | Ile | Pro | Thr | Leu | Asn | Thr | Xaa | His | Arg | Cys |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Ala | Met | Pro | Ser | Pro | Ser | Gln | Leu | Arg | His | Cys | Ile | Val | Leu | Ala |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43575

<211> 155

<212> PRT

<213> A.fumigatus

<400> 43575

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Trp | Phe | Gly | Val | Leu | Lys | Cys | Ile | Ser | Arg | Met | Tyr | Ile | Pro | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Pro | Thr | Glu | Ala | Ala | Trp | Leu | Phe | Pro | Tyr | Phe | Leu | Phe | Pro | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Arg | Thr | Phe | Pro | Pro | Pro | Pro | Pro | Leu | Ser | Ser | Leu | Thr | Thr | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Phe | Ser | Pro | Phe | Leu | Ser | Ser | Ser | Ser | Ala | Tyr | Ser | Leu | Cys | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Phe | Ser | Ser | Phe | Ser | Arg | Phe | Thr | Ser | Phe | Ser | Leu | Ser | Pro | Ser |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Phe | Ser | Pro | Ser | Val | Ser | Phe | Ser | Leu | Leu | Phe | Leu | Pro | Ser | Ser | Ser |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Ser | Leu | Leu | Leu | Phe | Leu | Leu | Phe | Phe | Pro | Leu | Leu | Thr | Leu | Arg |     |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Leu | Pro | Phe | Pro | Ser | Leu | Ser | Leu | Ser | Phe | Leu | Pro | Pro | Leu | Ala |     |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Ser | Tyr | Ser | Leu | Val | Thr | Leu | Leu | His | Ser | Pro | Leu | Ile | Leu | Val | His |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Thr | Ser | Ile | Ser | Leu | Ser | Arg | Ser | Pro | Ile |     |     |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     |

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<210> 43576

<211> 146

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (20), (25), (27)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43576

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Thr | Met | Gly | Tyr | Thr | Phe | Tyr | Leu | Tyr | Ile | Ser | Thr | His | Arg | Thr |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Ile | Arg | Xaa | Asn | Asp | Leu | Thr | Xaa | Glu | Xaa | Phe | Pro | Thr | Thr | Thr |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Ser | Asn | Tyr | Ser | Thr | Asn | Asn | Phe | Thr | Met | Asn | Ala | Val | Ala | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Gln | Pro | Cys | Leu | Asn | Asp | Gly | Gln | Cys | His | Tyr | Ala | Ile | Asn | Trp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ser | Ile | Leu | Ala | Met | Arg | Asn | Thr | Ile | Ser | Pro | Leu | Val | Ser | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Phe | Gly | Met | Leu | Pro | Val | Ser | Asn | Arg | Pro | Tyr | Phe | Thr | Ser | Asp | Thr |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Arg | Ala | Leu | Tyr | Gly | Gly | Ser | Gly | Asn | Leu | Thr | Gln | Ile | Asn | Gly |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Phe | Ala | Ser | Ile | Ala | Ala | Ala | Leu | Thr | Ala | Asn | Ala | Arg | Asn | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Cys | Gln | Gly | Ala | Val | Leu | Gly | Asp | Ala | Trp | Thr | His | Val | Ser | Tyr |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| Ile | Arg |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43577

<211> 150

<212> PRT

<213> A.fumigatus

<400> 43577

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Gly | Ile | Cys | Asp | Gly | Ile | Ala | Arg | Asn | Ala | Thr | Ala | Gly | Ser |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Gly | Ala | Tyr | Ser | Val | Cys | Thr | Ser | Lys | Asp | Gln | Leu | Ser | Tyr | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Asp | Arg | Tyr | Tyr | Lys | Ser | Gln | Lys | Lys | Ala | Ala | Ser | Ala | Cys | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Phe | Ala | Gly | Ala | Ala | Ser | Val | Gln | Ser | Pro | Lys | Gly | Glu | Ser | Ala | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Cys | Lys | Ser | Leu | Val | Ser | Gln | Ala | Gly | Ser | Ala | Gly | Thr | Gly | Thr | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Thr | Ser | Gln | Pro | Thr | Gly | Gly | Ser | Glu | Ser | Thr | Gly | Gly | Gly | Gly | Gly |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Gly | Gly | Gly | Gly | Gly | Gly | Gly | Gly | Gly | Ala | Ala | Ala | Ser | Thr | Ser | Thr |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Ser | Lys | Gly | Ala | Ala | Ala | Gly | Ala | Ala | Ser | Pro | Ala | Ala | Val | Arg | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Gly | Trp | Pro | Leu | Val | Thr | Tyr | Gly | Leu | Val | Ala | Ala | Met | Ala | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |

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Ile Leu Met Ile Ser Leu  
145 150

<210> 43578  
<211> 108  
<212> PRT  
<213> A.fumigatus

<400> 43578  
Pro Lys Lys Val Leu Val Leu Trp Leu Val Ala Thr Thr Asp Pro Ser  
1 5 10 15  
Val Ile Ser Thr Phe Thr Ile Lys Ile Met Lys Arg Lys Ser Ala Ala  
20 25 30  
Asn Phe Ser Asp Thr Gly Ala Lys Arg Ala Pro Arg Gln Asp Pro Val  
35 40 45  
Ser Cys Glu Ser Cys Arg Arg Lys Lys Leu Lys Cys Asn Arg Gln Arg  
50 55 60  
Pro Cys Ser Ser Cys Val Thr Arg Arg Leu Ser Cys Ser Tyr Gly Ile  
65 70 75 80  
Ser Leu Glu Arg Ile Glu Pro Ala Ile Val Glu Val Glu Asn Ala Ser  
85 90 95  
Leu His His Lys Ala Arg Arg Ile Arg Glu Arg Gly  
100 105

<210> 43579  
<211> 86  
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<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (2)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43579  
Gly Xaa Arg Glu Arg Val Ser Phe Gln Pro Arg Gly Glu Asp Ile Asp  
1 5 10 15  
Asp Ala Asp Val Arg Ala Leu Asp Glu Tyr Val Ser Glu Glu Gln Ala  
20 25 30  
Met Glu Ser Ala Leu Leu Glu Met Ala His Val Pro Phe Glu Asn Thr  
35 40 45  
Gly Arg Thr His Glu Ala Asn Ser Ser Phe Ser Asp Glu Glu Glu Tyr  
50 55 60  
Asp Asp Ile Phe Met Ser Leu Ala Asp Gln Gly Pro Gln Ser Gln Asp  
65 70 75 80  
Met Asp Met Ser Ser Gly  
85

<210> 43580  
<211> 147  
<212> PRT  
<213> A.fumigatus

<400> 43580  
His Ile Gln Ile Leu Phe Asn Phe Pro Tyr Thr Ala Leu Pro Gly Pro  
1 5 10 15



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Cys Gly Tyr Arg Ile Thr Thr Ser Glu Gln Asn Ser Cys Glu Arg Gln  
                   20                  25                  30  
 Ile Val Tyr Thr Val Val Ser His Gly Ile Ser Tyr Lys Asn Val His  
                   35                  40                  45  
 Gly Tyr Gly Ser Asn Asp Val Leu Val Pro Tyr Cys Ile Asp Arg Thr  
                   50                  55                  60  
 Thr Gly Cys Ser Gly Arg Ile Asn Asn Tyr Glu Leu Arg Met Arg Pro  
 65                  70                  75                  80  
 Ser Cys Trp Met Gln Pro Trp Asn Val Gln Pro Ser Phe Pro Pro Thr  
                   85                  90                  95  
 Ala His Arg Asn Ile Leu Gly Gly Asn Lys Cys Ser Met Ser Pro Tyr  
                   100                  105                  110  
 Gln Ser Thr Asp Ile Arg Thr Gln Ser Gln Leu Pro Asp Arg Tyr Leu  
                   115                  120                  125  
 Leu Ser Val Ser Leu Gln Ser Thr Arg Leu His His Gly Arg Gly Ser  
                   130                  135                  140  
 Thr Ala Tyr  
 145

<210> 43581  
 <211> 148  
 <212> PRT  
 <213> A.fumigatus

<400> 43581  
 Asp Gln Gln Asp Ile Trp Thr Ala Ala Ser Ser Arg Ser Ser Ala Cys  
 1                  5                  10                  15  
 Lys Tyr Leu His Thr Thr Thr Thr Ile Thr Met Ala Thr Arg Ile Lys  
                   20                  25                  30  
 Leu Leu Pro Asn Pro His Tyr Arg Lys Ser Gly Thr Lys Ser Tyr Val  
                   35                  40                  45  
 His Leu Met Arg Lys Tyr Arg Phe Thr Pro Thr Lys Gly Gly Arg Tyr  
                   50                  55                  60  
 Phe Leu Ser Ser Ser Leu His Gln Thr Gly Arg Gln Tyr Thr His Leu  
 65                  70                  75                  80  
 Pro Val Gly Gly Arg Ala Arg Ile Gln His Val Leu Arg Lys Arg Ile  
                   85                  90                  95  
 Ala Asp Thr Asp Glu Thr Ser Asp Val Gly Ala Asp Asp Val Gln Asn  
                   100                  105                  110  
 Asp Thr Met Tyr Leu Ala Pro Val Ser Ile Gly Thr Pro Ala Gln Thr  
                   115                  120                  125  
 Ile His Leu Glu Val Asp Thr Gly Ser Ala Asp Leu Trp Val Arg His  
                   130                  135                  140  
 Tyr Ala Ser Arg  
 145

<210> 43582  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

<400> 43582  
 Thr Pro Met Ile Arg Cys Ile Gly Tyr Val Ser Asp Ser Ser Ser Ile  
 1                  5                  10                  15  
 Ser Trp Thr Ala Phe Phe Glu Leu Ala Leu Arg Leu Ile Arg Phe Leu  
                   20                  25                  30

# 19674

Phe Tyr Phe Tyr Phe Pro Leu Asn Ala Thr Gln Thr Phe Asp Ser Tyr  
 35 40 45  
 Leu Leu His Pro Leu Ser Arg Thr Gln Thr Asn His Pro Ala Ser Phe  
 50 55 60  
 Ala Ser Glu Ser His  
 65

<210> 43583  
 <211> 170  
 <212> PRT  
 <213> A.fumigatus

<400> 43583  
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 1 5 10 15  
 Tyr Thr Lys Ile Cys Gly Ile Leu Ile Asn Ser Leu Phe Ser Ser Asn  
 20 25 30  
 Glu Tyr Ile Ala Val Val Gly Ile Gly Ile Asn Ala Thr Asn Ala Ser  
 35 40 45  
 Pro Thr Thr Ser Leu Asn Ala Leu Ala Ser Arg Phe Val Ser Asn Lys  
 50 55 60  
 Ser Ala Pro Ile Thr Leu Glu Lys Leu Leu Ala Arg Cys Leu Thr Thr  
 65 70 75 80  
 Phe Glu Glu Leu Tyr Thr Arg Phe Leu Arg Thr Gly Phe Asp Arg Glu  
 85 90 95  
 Phe Glu Thr Ile Tyr Tyr Asp Asp Trp Leu His Met His Gln Val Val  
 100 105 110  
 Thr Leu Glu Glu Glu Gly Gly Ala Arg Ala Arg Ile Lys Gly Ile Thr  
 115 120 125  
 Arg Asp Tyr Gly Leu Leu Leu Ala Glu Glu Leu Gly Trp Asp Asp Arg  
 130 135 140  
 Pro Thr Gly Arg Val Trp Gln Leu Gln Ser Asp Ser Asn Ser Phe Asp  
 145 150 155 160  
 Phe Phe Arg Gly Leu Val Lys Lys Lys Val  
 165 170

<210> 43584  
 <211> 189  
 <212> PRT  
 <213> A.fumigatus

<220>  
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 <222> (1)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43584  
 Xaa Ala Ile Leu His Ser Leu Glu Thr Asn Met Ser Tyr Tyr His Cys  
 1 5 10 15  
 Cys Leu Ser Val Ala Ala Ile His Leu Lys Ala Ser Asn Gly Arg Ser  
 20 25 30  
 Ser Asp Lys Ile Asp His Asp Ile Met Arg His Arg Tyr Glu Ala Val  
 35 40 45  
 Ser Gln Leu Cys Arg Ala Leu Asn Ser Asp Asn Gly His Glu Gln Ile  
 50 55 60  
 Leu Asp Ala Thr Leu Ala Met Ile Val Phe His Gly Ser Val Gly Ser

| Year | Country       | Population (millions) | Urban population (millions) | Urban population (%) | Population density (per sq km) | Urban population density (per sq km) | Population growth rate (%) | Urban population growth rate (%) | Population growth rate (%) | Urban population growth rate (%) | Population growth rate (%) | Urban population growth rate (%) |
|------|---------------|-----------------------|-----------------------------|----------------------|--------------------------------|--------------------------------------|----------------------------|----------------------------------|----------------------------|----------------------------------|----------------------------|----------------------------------|
| 1950 | United States | 150                   | 80                          | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1955 | United States | 160                   | 85                          | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1960 | United States | 170                   | 90                          | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1965 | United States | 180                   | 95                          | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1970 | United States | 190                   | 100                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1975 | United States | 200                   | 105                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1980 | United States | 210                   | 110                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1985 | United States | 220                   | 115                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1990 | United States | 230                   | 120                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1995 | United States | 240                   | 125                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2000 | United States | 250                   | 130                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2005 | United States | 260                   | 135                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2010 | United States | 270                   | 140                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2015 | United States | 280                   | 145                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2020 | United States | 290                   | 150                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2025 | United States | 300                   | 155                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2030 | United States | 310                   | 160                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2035 | United States | 320                   | 165                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2040 | United States | 330                   | 170                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2045 | United States | 340                   | 175                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2050 | United States | 350                   | 180                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2055 | United States | 360                   | 185                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2060 | United States | 370                   | 190                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2065 | United States | 380                   | 195                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2070 | United States | 390                   | 200                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2075 | United States | 400                   | 205                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2080 | United States | 410                   | 210                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2085 | United States | 420                   | 215                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2090 | United States | 430                   | 220                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2095 | United States | 440                   | 225                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 2100 | United States | 450                   | 230                         | 53                   | 30                             | 100                                  | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1950 | China         | 550                   | 100                         | 18                   | 150                            | 20                                   | 1.2                        | 1.5                              | 1.2                        | 1.5                              | 1.2                        | 1.5                              |
| 1955 | China         | 560                   | 105                         | 19                   |                                |                                      |                            |                                  |                            |                                  |                            |                                  |

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<210> 43585
<211> 228
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(21),(39),(40),(115)
<223> Identity of amino acid sequences at the above locations are unknown.
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|---|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <400>   | 43585 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ala Arg Phe Ser Xaa Thr Ala Ile Cys Thr Thr Val Pro Ser Pro Gly<br>1                  5                        10                        15             |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ala Pro Ala Phe Xaa Tyr Ala Gln Gln Gln Val His His Val Leu Ser<br>20                        25                        30                               |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ser Val Val Glu Lys Thr Xaa Xaa Tyr Tyr Leu Pro Pro Cys Glu Leu<br>35                        40                        45                               |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ala Lys Ile Val Asn Ala Thr Ile Glu Ala Cys Asp Pro Leu Asp Gly<br>50                        55                        60                               |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arg Thr Asp Gly Val Val Ser Arg Thr Asp Leu Cys Lys Leu His Phe<br>65                        70                        75                        80     |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asp Leu Ser Lys Ile Ile Gly Glu Pro Tyr Tyr Cys Ala Ala Lys Thr<br>85                        90                        95                               |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ser Thr Ser Leu Gly Phe Gly Phe Ser Lys Arg Gln Ala Ala Gly Ser<br>100                        105                        110                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thr Thr Xaa Tyr Gln Pro Ala Gln Asn Gly Thr Val Thr Lys Glu Gly<br>115                        120                        125                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Val Ala Val Ala Lys Ala Ile Tyr Asp Gly Leu His Asn Thr Gln Gly<br>130                        135                        140                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gln Arg Ala Tyr Leu Ser Trp Gln Ile Ala Ser Glu Phe Ser Asp Ala<br>145                        150                        155                        160 |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thr Thr Glu Trp Asn Asn Asp Thr Gly Ser Trp Glu Leu Ser Ile Pro<br>165                        170                        175                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ser Thr Gly Gly Glu Phe Val Thr Lys Phe Val Gln Leu Leu Asp Leu<br>180                        185                        190                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asp Asn Leu Ser Thr Leu Asp Asn Val Thr Tyr Asp Thr Leu Val Glu<br>195                        200                        205                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trp Met Asn Thr Ala Met Val Arg Tyr Met Ser Ser Pro Arg Gly Arg<br>210                        215                        220                            |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lys Glu Pro Arg   |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

225

&lt;210&gt; 43586

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (25), (41), (58), (60), (135)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43586

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Cys | Gln | Asp | Leu | His | Leu | Leu | Arg | Arg | Met | Leu | Arg | Arg | Trp | Thr |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Gly | Arg | His | Glu | Pro | Gly | Ser | Ala | Xaa | Arg | Arg | Phe | Val | Arg | Arg | Cys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| His | His | Arg | Val | Pro | Arg | Leu | Ser | Xaa | Met | Pro | Ser | Ser | Arg | Ser | Thr |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Ser | Tyr | Arg | Arg | Leu | Trp | Arg | Arg | Xaa | Trp | Xaa | Thr | Thr | Phe | Pro |
|     |     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |
| Arg | Ala | Asn | Trp | Pro | Arg | Ser | Ser | Thr | Pro | Pro | Leu | Arg | Pro | Ala | Ile |
| 65  |     |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |
| Leu | Ser | Thr | Ala | Ala | Leu | Thr | Gly | Trp | Ser | Pro | Ala | Pro | Thr | Phe | Ala |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Cys | Thr | Leu | Thr | Phe | Arg | Arg | Ser | Ser | Gly | Ser | Arg | Thr | Thr | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Pro | Gln | Arg | Pro | Ala | Pro | Pro | Ser | Ala | Ser | Ala | Ser | Ala | Asn | Ala | Arg |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gln | Pro | Ala | Ala | Arg | Pro | Xaa | Thr | Ser | Leu | His | Lys | Thr | Ala | Pro | Ser |
|     |     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |
| Pro | Arg | Arg | Gly | Trp | Leu | Ser | Pro | Arg | Pro | Phe | Thr | Thr | Val | Cys | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Thr | Pro | Arg | Ala | Ser | Ala | Pro | Thr | Ser | Pro | Gly | Arg | Ser | Pro | Arg | Asn |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ser | Pro | Met | Pro | Pro | Pro | Ser | Gly | Thr | Met | Thr | Pro | Ala | Pro | Gly | Ser |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |

&lt;210&gt; 43587

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (57), (74), (91), (93)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43587

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Asn | Gly | Thr | Gln | Ser | Thr | Phe | Trp | Leu | Thr | Arg | Pro | Trp | Gly | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Gln | Leu | Ser | Gly | Lys | Thr | Leu | Thr | Arg | Asn | Phe | Tyr | Val | Arg | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Asp | Ala | Lys | Ile | Tyr | Thr | Tyr | Tyr | Glu | Gly | Cys | Ser | Asp | Gly | Gly |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Glu | Gly | Met | Ser | Gln | Val | Gln | Xaa | Tyr | Gly | Asp | Leu | Tyr | Asp | Gly |

19677

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      50              55              60
Ala Ile Thr Gly Cys Pro Gly Phe Pro Xaa Cys Pro Ala Ala Gly Pro
65              70              75              80
Pro Arg Leu Ile Val Gly Cys Gly Glu Asp Xaa Gly Xaa Leu Pro Ser
      85              90              95
Pro Val Arg Thr Gly Gln Asp Arg Gln Arg His His
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<210> 43588

<211> 313

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (214), (282), (298)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43588

```

Ala Leu Gly Thr Pro Pro Val Val Asp Thr Thr Val Ala Ile Ser Ser
1              5              10              15
Ser Gln Trp Pro Thr Asp Leu Lys Val Lys Gln Leu Ala Asn Phe Gly
      20              25              30
Pro Ser Pro Trp Ile Glu Asn Leu Ala Val Arg His Ser Gly Glu Val
      35              40              45
Leu Ala Thr Gln Met Leu Asp Pro Arg Ile Leu Gln Val Asp Pro Asp
      50              55              60
Gly Lys Leu Pro Pro Ile Val Ile His Ser Trp Ala Glu Gly Ala Ser
65              70              75              80
Ala Gly Lys Tyr Asp Gly Val Leu Gly Ile Thr Glu Thr Arg His Asp
      85              90              95
Glu Phe Tyr Val Ala Val Ala Gly Gln Tyr Asp Glu Asn Met Lys Leu
      100              105              110
Leu Pro Asn Ser Thr Asn Tyr Ile Phe Arg Val Asp Phe Asp Thr Leu
      115              120              125
Glu Val Ser Ser Ala Gly Glu Val Leu Ser Asn Ala Thr Val Val Glu
      130              135              140
Leu Thr Ser Leu Asp Gly Ser Gln Leu Val Asn Gly Ala Thr Thr Leu
      145              150              155              160
Asn Glu Asp Ala Ile Leu Val Ser Asp Ser Ser Asn Gly Trp Val Tyr
      165              170              175
Lys Val Asp Val Arg Thr Gly Ala Tyr Asp Val Ile Val Asp Asp Pro
      180              185              190
Leu Met Lys Lys Asn Ser Gly Ala Glu Trp Lys Ala Gly Val Asn Gly
      195              200              205
Ile Lys Val Phe Gly Xaa Tyr Leu Tyr Trp Thr Asn Thr Asp Ala Gly
      210              215              220
Leu Leu Ala Arg Ile Lys Ile Asn Asp Asp Gly Lys Pro Cys Gly Val
      225              230              235              240
Ser Glu Ile Val Ala Ser Asn Leu Thr Glu Ala Asp Asp Phe Thr Leu
      245              250              255
Asp Asp His Arg Thr Pro Tyr Phe Ala Leu Gly Pro Leu Glu Lys Glu
      260              265              270
Ile Arg Arg Gly Ser Phe Leu Glu Gly Xaa Gln Gln Ala Gly His Leu
      275              280              285
Leu Tyr Trp Ala Thr His His Gln Ser Xaa Gly Pro Ala Thr Leu Val

```

## 19678

290 295 300  
 Asn His His Pro Thr Gly Pro Ser Leu  
 305 310

<210> 43589  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

<400> 43589  
 Arg Thr Lys Arg Gly Thr Pro Ser Ala Pro Thr Glu Leu Gly Gly Arg  
 1 5 10 15  
 Arg Gly Ile Arg Gly Arg Lys Trp Val Val Leu Met Val Pro Gly Gly  
 20 25 30  
 Ile Tyr Glu Ser Pro Gly Ser Trp Gln Gly Arg Ile Arg Ser Pro Ile  
 35 40 45  
 Gly Glu Ser Arg Arg Ala Asp Ser Arg Arg Pro Asp Val His Arg Phe  
 50 55 60  
 Arg Ile Lys Val His Ala Phe Glu Asp Thr Arg Tyr Ile Met Ile Gly  
 65 70 75 80  
 Pro Thr Leu Glu Tyr Ser Glu Phe Glu Ala Lys Ile Arg Glu Lys Phe  
 85 90 95  
 Gly Phe Arg Ser Leu Leu Arg Ile Arg Met Gln Asp Glu Gly Asp Met  
 100 105 110  
 Ile Thr Met Val Asp Gln Glu Asp Leu Asp Leu Leu Ser Ser Ala  
 115 120 125  
 Thr Glu Ala Ala Arg Lys Glu Gly Ser Glu Met Gly Lys Met Glu Val  
 130 135 140  
 Ser Pro Ile Pro His Val Cys Glu Thr Thr Arg Asn  
 145 150 155

<210> 43590  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43590  
 Leu Ser Arg Arg Leu Glu Pro Asp Phe Asn Lys Asn Ile Gln Leu Asp  
 1 5 10 15  
 Val Pro Val Thr Cys Ser Gly Ser Phe Val Phe Tyr Thr Thr Phe Thr  
 20 25 30  
 Pro Leu Pro Gln Phe Ser Val Asp Pro Val Pro Thr Pro Glu Pro Ala  
 35 40 45  
 Arg Thr Pro Asp Tyr Tyr Val Asp Val Ala Pro Arg Leu Thr Leu Arg  
 50 55 60  
 Gly Lys Lys Leu Pro Leu Asn Ala Leu Ser Ile Phe Ser Val  
 65 70 75

<210> 43591  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 43591  
 Ala Pro Gly Ala Gly Phe Ala Thr Arg Asn Pro Ser Gln Leu Asn Thr  
 1 5 10 15

## 19679

Leu Ser Thr Gly Ile Ser Thr Pro Ala Leu Val Lys Tyr Pro Arg Thr  
 20 25 30  
 Arg Ser Thr Ser Pro Val Val Arg His His Thr Ser Asn Pro Ala Leu  
 35 40 45  
 Arg Asn Phe Ser Asn Ala Gly Thr Ser Ser Gly Arg Ser Cys Ser Asp  
 50 55 60  
 Ala  
 65

&lt;210&gt; 43592

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43592

Arg Pro Pro Pro Ser Pro Pro Thr Pro Leu Gln Gln Pro Pro Ser Ser  
 1 5 10 15  
 Pro Ser Gln Thr Pro Pro Ser Ile Pro Pro Gln Ala His Arg Ser  
 20 25 30  
 Met Pro Pro Glu Thr Pro Pro Ser Pro Gln Gln Thr His Pro Thr Asp  
 35 40 45  
 Ala Pro Pro Gln Thr Thr Ser His Pro Pro Pro Gln Thr Gln Ser Ser  
 50 55 60  
 Gln Ser Gln Pro Asp Lys Pro Pro Ala Pro Ala Ser Gln Pro Ala Thr  
 65 70 75 80  
 His His Asn Ser Thr Pro Phe Gln Pro Ala Ser Gln Pro Pro Pro Trp  
 85 90 95

&lt;210&gt; 43593

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43593

Val Ala Gln Pro Arg Arg Phe Phe Thr Glu Glu Glu Arg Asp Ala Phe  
 1 5 10 15  
 Leu Ala Gly Tyr Ala Ser Leu Gln Leu Arg Pro Glu Leu Val Pro Ala  
 20 25 30  
 Leu Glu Lys Leu Arg Ser Ala Gly Phe Glu Val Trp Cys Leu Thr Thr  
 35 40 45  
 Gly Asp Val Glu Arg Val Arg Gly Tyr Phe Thr Arg Ala Gly Val Glu  
 50 55 60  
 Met Pro Val Glu Arg Val Leu Ser Cys Asp Gly Leu Arg Val Ala Lys  
 65 70 75 80  
 Pro Ala Pro Gly Ala Tyr Arg Ala Ala Ile Glu Thr Ile Gly Ser Gly  
 85 90 95  
 Gly Glu Asp Glu Lys Trp Phe Ala Ala His Leu Trp Asp Val Ser  
 100 105 110  
 Ala Ala Val Arg Ala Gly Phe Arg Gly Ala Tyr Cys Gly Val Leu Glu  
 115 120 125  
 Gly Glu Asp Cys Trp Glu Val Phe Glu Arg Glu Ser Leu Glu Val Val  
 130 135 140  
 Ala Glu Gly Leu Val Glu Met Val Glu Gly Val Ile Gln Leu Ser Gly  
 145 150 155 160

&lt;210&gt; 43594

19680

<211> 124

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (122)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43594

```
Gln Ser Ser Ser Thr Thr Asn Gln Ser Leu Glu Leu Glu Ser Arg Ser
1          5          10          15
Lys Pro Lys Asn Leu Val Leu Asn His Pro Tyr Arg Ser His Lys Met
          20          25          30
Gln Ile Lys Ser Phe Val Leu Ala Ala Ser Ala Ala Ala Thr Ala Ser
          35          40          45
Ala Ala Ala Cys Gln Ala Pro Thr Asn Lys Tyr Phe Gly Ile Val Ala
          50          55          60
Ile His Ser Gly Ser Ala Val Gln Tyr Gln Pro Phe Ser Ala Ala Lys
65          70          75          80
Ser Ser Ile Phe Ala Gly Leu Asn Ser Gln Asn Ala Ser Cys Asp Arg
          85          90          95
Pro Asp Glu Lys Ser Ala Thr Val His Ile Pro Gly Trp Leu Leu Ile
          100          105          110
Gln Ala Arg Pro Trp Lys Ile Ser Ile Xaa Pro Pro
          115          120
```

<210> 43595

<211> 81

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (32), (67), (68)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43595

```
Cys Gly Gln Asn Leu Leu Leu Gln Pro Ser Asp Cys Ser Val Leu Asp
1          5          10          15
Arg Gln Gln Met Leu Val Leu Tyr Asp Pro Ala Asp Asp Phe Glu Xaa
          20          25          30
Gly Ala Leu Thr Arg Met Ala Val Asp Asn Asp Phe Gly Glu Leu Pro
          35          40          45
Asp Asp Thr Val Cys Leu Pro Ser Arg Ala Ser Ser His Cys Glu Lys
          50          55          60
Lys Asn Xaa Xaa Phe Leu Val Val Cys Gly Phe Ser His Arg Val Val
65          70          75          80
Thr
```

<210> 43596

<211> 218

<212> PRT

<213> A.fumigatus



19681

<220>

<221> UNSURE

<222> (1), (36)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43596

```

Xaa Ile Leu Leu Leu Ala Val Thr Ala Cys Thr Thr Arg Gln Thr Tyr
1           5           10           15
Ser Ile Ile Arg Gln Leu Pro Glu Val Ile Val His Ser His Pro Cys
           20           25           30
Gln Ser Thr Xaa Phe Lys Val Ile Arg Arg Val Ile Glu Asp Glu His
           35           40           45
Leu Leu Ala Val Lys Asp Arg Ala Val Gly Trp Leu Lys Lys Glu Ile
           50           55           60
Leu Ala Ala Ser Ala Gln Ser Ser Asn Asn Ala Thr Tyr Ile Phe Leu
65           70           75           80
Asn Pro His Tyr Phe Ser Val Leu Phe Pro Leu Leu Phe Asn Ser Ala
           85           90           95
Asp Leu Leu Leu Asn Val Ser Thr Asp Ile Ala Ala Ser Trp Ile Gln
           100          105          110
Phe Ser Gln Thr Leu Ala Pro Ser Ile His Ala Ala Leu Ser Leu Tyr
           115          120          125
Tyr Ile Leu Leu Gln Ser Ser Thr Leu Arg Thr Gln Leu Gln Leu Glu
           130          135          140
Lys Thr Tyr Pro Tyr Phe Arg Ser Arg Phe Leu Glu Pro Leu Lys Thr
145          150          155          160
Leu Cys His Ala Phe Glu Thr Glu Met Thr Gln Asn Gly Gly Asp Gly
           165          170          175
Arg Ile Glu Ala Ala Val Gly Glu Glu Met Ser Gln Ile Gly Met Ala
           180          185          190
Arg Ser Val Gly Leu Ile Ser His Val Val Glu Arg Val Glu Glu Glu
           195          200          205
Arg Leu His His Gly Val Glu Ile Ala Cys
           210          215

```

<210> 43597

<211> 184

<212> PRT

<213> A.fumigatus

<400> 43597

```

Asp Asp Ile Asp Asp Glu Gln Val Ile Val Arg Gly Phe Ala Gly Asn
1           5           10           15
Ala Val Arg Thr Glu Arg Gly Ile Gln Tyr Leu Gly Lys Arg Leu Ala
           20           25           30
Lys Tyr Val Leu Phe Met Thr Tyr Pro Asp Gln Pro Tyr Arg Pro Leu
           35           40           45
Lys Gln Ser Arg Thr Lys Thr Phe Thr Glu Ser Leu Gly Ala Trp Lys
           50           55           60
Thr Ala Lys Val Ser Val Ile Asn Asp Pro Ser Gly Ser Arg Thr Arg
65           70           75           80
Ala Asp Glu Ala Glu Asp Glu His Arg Tyr Tyr Gln Ile Thr Ser Ile
           85           90           95
Ser Phe Ile Gly His Ser Leu Gly Gly Leu Val Gln Thr Tyr Ala Ile
           100          105          110
Ala Tyr Ile Gln Lys His Ser Pro Glu Phe Phe Asn Leu Ile Arg Pro

```

## 19682

```

      115              120              125
Val Asn Phe Ile Ala Leu Ala Thr Pro Phe Leu Gly Leu Ser Asn Glu
      130              135              140
Asn Pro Met Tyr Val Arg Phe Ala Leu Asp Leu Gly Leu Val Gly Arg
145              150              155              160
Thr Gly Gln Asp Leu Gly Leu Ser Trp Thr Ala Pro Arg Gly Leu His
      165              170              175
Asp Ala Ala Gly Lys Tyr Thr Ser
      180

```

&lt;210&gt; 43598

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (249)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43598

```

Asn Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Glu Asp Tyr Ser
1              5              10              15
Asp Gln Leu Ala Lys Asp Ala Tyr Gln Ser Gly Ala Tyr Asp Tyr Met
      20              25              30
Asp Ile Val Ala Leu Ser Ala Arg Gln Val Met Gly Ala Thr Thr Phe
      35              40              45
Ser Gly Thr Pro Asp Asp Pro Ile Leu Phe Leu Lys Glu Ile Ser Ser
      50              55              60
Asn Gly Asn Phe Gln Thr Ile Asp Val Ile Phe Pro Ser Phe Pro Phe
65              70              75              80
Phe Met Tyr Thr Asn Pro Arg Trp Leu Ala Tyr Leu Leu Glu Pro Leu
      85              90              95
Ile Glu His Met Leu Ser Gly Gln Tyr Pro Asn Thr Tyr Ala Met His
      100              105              110
Asp Leu Gly Ala His Phe Pro Asn Ala Thr Gly His Pro Asp Gly Arg
      115              120              125
Asp Glu Tyr Met Pro Val Glu Glu Cys Gly Asn Met Leu Ile Met Gly
      130              135              140
Leu Ala Met Val Asn Ser Leu Arg Tyr Thr Asn Asp Ser Ala Ala Ser
145              150              155              160
Ser Ile Trp Ser Thr Leu Gly Val Pro Pro Lys Val Ser Glu Pro His
      165              170              175
Thr Gly Tyr Phe Pro Leu Gly Glu Leu Gln Ala Leu Ser Gly Ile Asp
      180              185              190
Gln Gln Asp Gly Lys Trp Gly Gly Gly Ala Glu Gly Glu Arg Leu Ala
      195              200              205
Glu Lys Trp Val Gln Arg Ser Tyr Arg Leu Trp Thr Gln Trp Thr Gly
      210              215              220
Tyr Leu Val Glu Tyr Ser Leu Glu Pro Ala Asn Gln Arg Lys Arg Asn
225              230              235              240
Ala Cys Ile Phe Pro Gln Ala Leu Xaa Leu Ile Cys Val Ser Leu His
      245              250              255
Gly Arg Phe Arg Arg Met Ala Arg Thr Ala Asp Gln Pro Gly Asn
      260              265              270

```

19683

<210> 43599  
 <211> 170  
 <212> PRT  
 <213> A.fumigatus

<400> 43599  
 Asp Trp Val Thr Ser Asn His Glu Ser Leu His Met Val Leu Leu Gln  
 1 5 10 15  
 Phe Ser Asp Phe Gly Thr Met Phe Asn Trp Arg Ser Leu Ser Gly Tyr  
 20 25 30  
 Met Gly His Ala Tyr Lys Trp Val Met Pro Asn Gly Ser Phe Lys Tyr  
 35 40 45  
 Val His Ile Phe Leu Ser Ser Asp Arg Gly Pro Asn Phe Ser Gln Gly  
 50 55 60  
 Glu Gln Ala Lys Asp Asn Ser Asp Leu Asp Pro Asp His Ala Thr Arg  
 65 70 75 80  
 Asp Leu Tyr Glu Ala Ile Glu Arg Arg Asp Tyr Pro Thr Trp Thr Ala  
 85 90 95  
 Asn Val Gln Val Val Asp Pro Ala Glu Ala Pro Asp Leu Gly Phe Asn  
 100 105 110  
 Ile Leu Asp Val Thr Lys His Trp Asn Leu Gly Thr Tyr Pro Lys Asp  
 115 120 125  
 Leu Pro Lys Ile Pro Ser Arg Pro Phe Gly Lys Leu Thr Leu Asn Arg  
 130 135 140  
 Ile Pro Asp Asn Phe Phe Ala Glu Val Glu Gln Leu Ala Leu Pro Pro  
 145 150 155 160  
 Leu Pro Ile Trp Cys Pro Ala Ser Cys Pro  
 165 170

<210> 43600  
 <211> 222  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (219)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43600  
 Ser Phe Val Thr Leu Cys Arg Leu Cys Thr Gly Ala Ile Leu Ala Phe  
 1 5 10 15  
 Thr Ser Ile Cys Ser Thr Phe Asp Ser Ala Val Phe Ser Ser Ser Thr  
 20 25 30  
 Gly Asn Val Ala Arg Val Phe Gly Val Gly Val Glu Val Ala Thr Leu  
 35 40 45  
 Ser Ser Ser Leu Tyr Ile Leu Gly Tyr Ala Cys Gly Pro Leu Ile Trp  
 50 55 60  
 Ala Pro Phe Ser Glu Leu Gln Gly Arg Arg Leu Pro Ile Leu Ile Gly  
 65 70 75 80  
 Met Leu Gly Phe Gly Ile Phe Asn Ile Ala Val Ala Val Ala Lys Asp  
 85 90 95  
 Leu Gln Thr Leu Leu Ile Cys Arg Phe Phe Cys Gly Val Phe Gly Ser  
 100 105 110  
 Cys Pro Leu Ala Val Val Ala Ala Ile Phe Ser Asp Ile Phe Asp Asn  
 115 120 125

## 19684

Arg Ser Arg Gly Ile Ala Ile Ala Met Phe Ser Ser Met Val Phe Leu  
 130 135 140  
 Gly Pro Leu Leu Ala Pro Phe Ile Gly Gly Phe Ile Asn Met Ser Tyr  
 145 150 155 160  
 Leu Gly Trp Arg Trp Thr Ala Tyr Leu Pro Ala Ile Met Gly Phe Ala  
 165 170 175  
 Ala Leu Ile Leu Asn Phe Phe Phe Leu Lys Glu Ser Tyr Pro Pro Val  
 180 185 190  
 Ile Leu Ile Tyr Lys Ala Ala Glu Leu Arg Arg Arg Thr Lys Asn Trp  
 195 200 205  
 Gly Ile His Pro His His Asp Gly Asn Leu Xaa Pro Pro Ala  
 210 215 220

&lt;210&gt; 43601

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43601

Asn Ser Gly Gly Thr Trp Ser Ser Asn Ser Ser Leu Thr Arg Val Ser  
 1 5 10 15  
 Thr Glu Ala Gly Asp Ser Arg Leu Thr Pro Pro Ser Pro Ala Ser Thr  
 20 25 30  
 Arg Lys Ile Pro Pro Pro Asn Leu Ser Pro Cys Thr Leu Cys Pro Pro  
 35 40 45  
 Pro Tyr Pro Cys Gly Ser Pro Ser Pro Pro Ala Pro Pro Pro Pro  
 50 55 60  
 Pro Leu Ser Pro Pro Arg Ala His Arg Leu Pro His Leu Pro Pro Pro  
 65 70 75 80  
 Pro Pro Pro Leu Met Thr Pro Ser Gly Pro Pro Pro Ser Pro Pro Pro  
 85 90 95  
 Ser Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro  
 100 105 110  
 Pro Pro Pro Pro Arg Ala Arg Pro Pro Pro Pro Pro Pro Pro Pro  
 115 120 125  
 Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro  
 130 135 140  
 Pro  
 145

&lt;210&gt; 43602

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43602

Asn Ile Ala Thr Glu Ala His Met Ile Ser Ser Arg Ile Arg Phe Asp  
 1 5 10 15  
 Gly Glu Gln Leu Met Ser Trp Trp Arg Pro Pro Leu Val Glu Leu Trp  
 20 25 30  
 Arg Asn Leu Glu Leu Glu Leu Val Pro Asp Glu Gly Leu Asp Arg Ser  
 35 40 45  
 Arg Arg Gln Gln Val Asp Pro Pro Ile Ala Ser Glu His Pro Glu Asp  
 50 55 60  
 Pro Pro Pro Gln Leu Ile Pro Leu His Thr Met Ser Pro Pro Val Pro  
 65 70 75 80

## 19685

Leu Arg Leu Pro Leu Pro Pro Thr Arg Pro Pro Ala Pro Pro Thr Leu  
                   85                  90                  95  
 Pro Pro Ala Arg Pro Pro Pro Pro Pro Pro Pro Pro Ala Pro Pro  
                   100                  105                  110  
 Pro Asp Asp Pro Leu Arg Thr Ala Pro Leu Pro Pro Pro Leu Pro Pro  
                   115                  120                  125  
 Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro  
                   130                  135                  140  
 Pro Pro Arg Ala Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro  
 145                  150                  155                  160  
 Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro  
                   165                  170                  175

&lt;210&gt; 43603

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43603

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly  
 1                  5                  10                  15  
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Arg Ala Arg Gly Gly  
                   20                  25                  30  
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly  
                   35                  40                  45  
 Gly Glu Gly Gly Gly Glu Gly Gly Gly Gly Pro Glu Gly Val Ile Arg Gly  
                   50                  55                  60  
 Gly Gly Gly Gly Gly Arg Trp Gly Arg Arg Trp Ala Arg Gly Gly Glu  
 65                  70                  75                  80  
 Ser Gly Gly Gly Gly Gly Ala Gly Gly Gly Glu Gly Glu Pro Gln Gly  
                   85                  90                  95  
 Tyr Gly Gly Gly His Ser Val Gln Gly Asp Lys Leu Gly Gly Gly Ile  
                   100                  105                  110  
 Phe Arg Val Leu Ala Gly Asp Gly Gly Val Asn Leu Leu Ser Pro Ala  
                   115                  120                  125  
 Ser Val Glu Thr Leu Val Arg Asp Glu Phe Glu Leu Gln Val Pro Pro  
                   130                  135                  140  
 Glu Phe Tyr Lys Gly Gly Ala Pro Pro Arg His Lys Leu Leu Ser Ile  
 145                  150                  155                  160  
 Glu Pro Asn Thr Gly Arg Tyr His Met Arg Phe Arg Arg Asp Ile Leu  
                   165                  170                  175  
 Ala Asp Pro Pro Ser Asp Asp Pro Ala Ala Asn Ala Ala Val Ala Glu  
                   180                  185                  190  
 Leu Asn Ala Ile Leu Asp Lys Gln Asp Thr Val Gly Gln Ser Phe Ser  
                   195                  200                  205  
 Glu Asp Val Phe Lys Glu Asn Val Ile Leu Leu Met Asp Asn Ala Arg  
                   210                  215                  220  
 Phe Leu His Cys Arg Thr Gln Ile Lys Asp Pro Arg Arg Phe Leu Arg  
 225                  230                  235                  240  
 Arg Ile Arg Phe Asn Gly Thr Pro Gly Ala Arg Asn  
                   245                  250

&lt;210&gt; 43604

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43604

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly  
 1 5 10 15  
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Ala Arg Gly Gly Gly  
 20 25 30  
 Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly  
 35 40 45  
 Gly Arg Gly Gly Gly Arg Gly Ala Val Leu Arg Gly Ser Ser Gly Gly  
 50 55 60  
 Gly Ala Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Arg Ala Gly Gly Arg  
 65 70 75 80  
 Val Gly Gly Ala Gly Gly Arg Val Gly Gly Arg Gly Ser Arg Arg Gly  
 85 90 95  
 Thr Gly Gly Asp Ile Val Cys Arg Gly Ile Ser Trp Gly Gly Ser  
 100 105 110  
 Ser Gly Cys Ser Leu Ala Met Gly Ser Thr Cys Cys Arg Arg Leu  
 115 120 125  
 Arg Ser Arg Pro Ser Ser Gly Thr Ser Ser Ser Lys Phe Leu Gln  
 130 135 140  
 Ser Ser Thr Arg Gly Gly Arg His Gln Asp Ile Ser Cys Ser Pro Ser  
 145 150 155 160  
 Asn Arg Ile Arg Asp Asp Ile Ile Cys Ala Ser Val Ala Ile Phe  
 165 170 175

&lt;210&gt; 43605

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (190)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43605

Lys Val Arg Thr Cys Leu Ser Arg Gln Leu Leu Pro Gln Asp Lys Asp  
 1 5 10 15  
 Gly Asp Glu Asp Glu Asp Val Asp Ala Asn Phe Met Phe Ile Glu Trp  
 20 25 30  
 Asn Asn Gln Ala Gln Ser Asn Ser Thr Arg Lys Pro Met Pro Glu Gly  
 35 40 45  
 Gly Phe Gly Gly Leu Ser Arg Arg Ser Gly Lys Lys Pro Val Ile Cys  
 50 55 60  
 Ala Val Asn Gly Leu Cys Leu Gly Gly Gly Cys Glu Met Val Val Asn  
 65 70 75 80  
 Ala Asp Ile Val Val Ala Cys Leu Gln Ala Tyr Phe Gly Leu Pro Glu  
 85 90 95  
 Val His Arg Gly Val Val Ala Ile Ala Gly Ala Leu Pro Arg Leu Val  
 100 105 110  
 Arg Thr Val Gly Arg Gln Arg Ala Met Glu Met Ala Leu Thr Gly Arg  
 115 120 125  
 Lys Val Ser Ala Glu Glu Ala Lys Asp Trp Gly Phe Val Asn Asp Val  
 130 135 140  
 Val Asp Ala Ala His His Val Val Lys Arg Ala Val Glu Ile Ser Glu  
 145 150 155 160

## 19687

```

Leu Ile Ala Ala Asn Asn Pro Asp Ala Val Val Val Asn Pro Glu Arg
      165                      170                      175
Ile Asn Phe Gly Trp Glu Gly Ile Cys Ala Gln Asn Ser Xaa Arg Leu
      180                      185                      190
Val Val His Thr Trp Ala Asn Met Leu Tyr Glu Gly Glu Asn Ile Lys
      195                      200                      205
Glu Gly Leu Pro Pro Phe Val Gln Lys Arg Lys Pro Thr Leu Gly Gly
      210                      215                      220
His Gln Phe Cys Asn Met Asn Ser Ile Ala Pro Gly Phe Phe His Phe
      225                      230                      235                      240
Met Pro Thr Asn Asn Glu Leu Pro Pro Tyr Lys Leu Thr Gly Glu Glu
      245                      250                      255
Lys Asn Phe His Pro Lys
      260

```

&lt;210&gt; 43606

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (26)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43606

```

Thr Lys Gly Gly Arg Pro Ser Leu Ile Phe Ser Pro Ser Tyr Ser Ile
1      5      10      15
Leu Ala Gln Val Trp Thr Thr Asn Arg Xaa Leu Phe Cys Ala Gln Ile
      20      25      30
Pro Ser Gln Pro Lys Leu Met Arg Ser Gly Phe Thr Thr Thr Ala Ser
      35      40      45
Gly Leu Leu Ala Ala Ile Ser Ser Glu Ile Ser Thr Ala Arg Phe Thr
      50      55      60
Thr Trp Cys Ala Ala Ser Thr Thr Ser Leu Thr Asn Pro Gln Ser Phe
      65      70      75      80
Ala Ser Ser Ala Glu Thr Phe Arg Pro Val Lys Ala Ile Ser Ile Ala
      85      90      95
Arg Cys Arg Pro Thr Val Arg Thr Asn Arg Gly Asn Ala Pro Ala Met
      100     105     110
Ala Thr Thr Pro Arg Cys Thr Ser Gly Ser Pro Lys Tyr Ala Cys Arg
      115     120     125
His Ala Thr Thr Ile Ser Ala Leu Thr Thr Ile Ser His Pro Pro Pro
      130     135     140
Arg His Ser Pro Leu Thr Ala Gln Met Thr Gly Phe Phe Pro Leu Arg
      145     150     155     160
Leu Asp Asn Pro Pro Lys Pro Pro Ser Gly Met Gly Phe Arg Val Leu
      165     170     175
Phe Asp

```

&lt;210&gt; 43607

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19688

&lt;400&gt; 43607

```

Thr Leu Leu Pro Pro Val Ala Asn Pro Leu Arg Lys Phe Pro Pro Leu
1          5          10          15
Gly Val Leu His Pro Arg Leu Ser Ser Gln Ile Phe Gln Val Thr Ile
          20          25          30
Met Leu Met Tyr Pro Ser Val Arg Lys Gly Leu Ile Thr Glu Pro Thr
          35          40          45
Ser Ala Pro Phe Ile His Gln Gln Asp Pro Val Cys Ile Gln Asp Asp
          50          55          60
Leu Phe Ile Pro Asp Phe Ser Gln Gln Asp Pro Thr Leu Gln Cys Phe
65          70          75          80
Tyr Val Phe Thr Thr Gly Cys Lys Glu Gly Val Arg
          85          90

```

&lt;210&gt; 43608

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (73)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43608

```

Thr Phe Ser Val Ser Asp Pro Ser Thr Pro Val Glu Lys Thr Ser Arg
1          5          10          15
Asp Leu Gly Glu Asn Leu Glu Ala Lys Phe Ser Asp Ile Phe Ala Leu
          20          25          30
Phe Ser Lys Ser Ile Arg Asp Pro Glu Ser Glu Glu Val Arg Val Asn
          35          40          45
Thr Leu Leu Ala Leu Ser Lys Leu Ala Met His Leu Asp Ser Glu Glu
          50          55          60
Asp Val Gly Pro Val Arg Ala Phe Xaa Asp Ile Val Pro Ser Met Val
65          70          75          80
Ala Val Leu Lys Asp Ser Ile Asp Gln Lys Gln Glu Asp Arg Val Met
          85          90          95
Gln Ala Phe Glu Val Phe Gln Thr Leu Leu Gly Cys Asp Pro Ala Leu
          100          105          110
Leu Thr Val His Leu Lys Asp Leu Val Ile Phe Met Asn Glu Leu Ala
          115          120          125
Ala Asn Thr Glu Val Asp Glu Asp Thr Arg Thr Gln Ala Ile Ser Phe
          130          135          140
Leu Met Gln Cys Val Gln Tyr Arg Lys Leu Lys Ile Gln Gly Met Arg
145          150          155          160
Ile Gly Glu Gln Leu Thr Arg Thr Ala Leu His Ile Val Thr Glu Leu
          165          170          175
Gly Asp Thr Ser Ser Asp Asp Asp Asp Ile Thr
          180          185

```

&lt;210&gt; 43609

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43609



## 19689

Leu Glu Cys Trp Ser Ile Trp Asp Gln Asn Gly Tyr Ser Val Ser Ser  
 1 5 10 15  
 Leu Gly Val Leu Asp Leu Met Ala Tyr Leu Arg Ala Thr Glu Arg Gln  
 20 25 30  
 Asp Leu Pro Asp Ile Asn Asn Leu Gly Arg Pro Ala Ser His Phe Leu  
 35 40 45  
 Ile Val Gly Gln Met Gly Leu Asp Pro Arg Trp Thr Lys Ser Gly  
 50 55 60

<210> 43610  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 43610  
 Gln Asn Met Phe Ile Thr Arg Gly Ile Pro Leu Val Asn Phe Ala Val  
 1 5 10 15  
 Ala Ser Ser Ala Leu Ala Phe Gln Val Phe Val Leu Tyr Pro Trp His  
 20 25 30  
 Asn Gln Leu Asp Ala Glu Phe Lys Ser Leu Lys Glu Glu His Ile Arg  
 35 40 45  
 Val Leu Asn Arg Met Ser Gln Arg Thr Ile Ser Gln  
 50 55 60

<210> 43611  
 <211> 178  
 <212> PRT  
 <213> A.fumigatus

<400> 43611  
 Arg Thr Cys Ile Phe His Arg Val Val Lys Thr Thr Glu Gln Cys Phe  
 1 5 10 15  
 Arg Phe Ser Val His Gln Val Lys Ser Ala Gln Glu Met Arg Gln Ile  
 20 25 30  
 Ile Gly Glu Ser Gln Thr Ser Leu Asn Pro Glu His Gly Pro Val Phe  
 35 40 45  
 Thr Val Asp Leu Phe His His Gly Gly Glu Gln Ser Leu Leu Met Ile  
 50 55 60  
 Gly His His Leu Val Leu Asp Leu Val Ser Trp Arg Ile Ile Leu Ala  
 65 70 75 80  
 Asp Met Glu Ala Met Ile Leu Asp Pro Gln His Gln Pro His Leu Thr  
 85 90 95  
 Met Ser Phe Gln Thr Trp Ala His Leu Gln Ala Glu Tyr Gly Thr Arg  
 100 105 110  
 His Leu Glu Pro Pro Pro Gly Gln Gln Pro Cys Ser Ile Asp Glu Pro  
 115 120 125  
 Ser Met Arg Gln Phe Trp Gly Ala Glu Asn Asn Ala Asn Thr Gly Gly  
 130 135 140  
 Asp Ser Lys Thr Arg Leu Ile Arg Met Asn Asp Asp Leu Thr Arg Lys  
 145 150 155 160  
 Leu Phe Gly Pro Ser Ser Gln Ala Leu Asp Val Glu Pro Val Glu Leu  
 165 170 175  
 Leu His

<210> 43612

<211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 43612  
 Ile Thr Gly Asp Ala Phe Thr Gly Val Ala Phe Leu Arg Asn Ala Ile  
 1 5 10 15  
 Ser Ile Gly Ile Pro Phe Ala Ile Ser Pro Trp Leu Glu Arg Ser Gly  
 20 25 30  
 Ala Gln Asn Met Phe Leu Thr Tyr Arg Phe Val Ser Leu Ala Val Thr  
 35 40 45  
 Leu Thr Ile Ile Pro Met Val Leu Tyr Gly Arg Lys Met Arg Met Leu  
 50 55 60  
 Thr Ala Ala Arg Tyr Arg Val Met Ala Gly Leu Arg Asp  
 65 70 75

<210> 43613  
 <211> 279  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (163), (199)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43613  
 Ile Ala Leu Phe Leu Asp Val Asp Ala Gly Gly Ser Leu Cys Leu Arg  
 1 5 10 15  
 Asn Lys Ala Tyr Ser Val Ala Glu His Ile Cys Ser Ser His Pro His  
 20 25 30  
 Tyr Phe His His Cys Ser Pro Cys Asp Ser His Leu Ile Gln Thr Ser  
 35 40 45  
 Thr Ala Val Ser Thr Thr Ser Arg Met Ser Asn His Arg Ser Ser Asp  
 50 55 60  
 Ala Leu Thr Phe Pro Asp Ser Ser Arg Ala Phe Leu Glu Pro His Leu  
 65 70 75 80  
 Pro Pro Asn Ser Lys Asn Phe Gln Ser Pro Asp Ser Gly Leu Pro Phe  
 85 90 95  
 Thr Thr Leu Thr Phe Ala Thr Ser Leu Asp Ser Ala Leu Ala Leu Ser  
 100 105 110  
 Pro Gly Ala Lys Thr Val Leu Ser Gly Pro Gln Ser Lys Ala Met Thr  
 115 120 125  
 His Tyr Leu Arg Ser Arg His Asp Ala Ile Leu Ile Gly Val Gly Thr  
 130 135 140  
 Ala Val Ala Asp Asp Pro Gly Leu Asn Cys Arg Ile Ala Gly Val Gly  
 145 150 155 160  
 Gly Tyr Xaa Gly Gln Gly Leu Gln Gly Gln Pro Arg Pro Ile Val Ile  
 165 170 175  
 Asp Pro Ser Ala Arg Trp Asp Phe Thr Glu Asn Ser Arg Ile Leu Thr  
 180 185 190  
 Leu Ala Arg Glu Gly Arg Xaa Arg Ala Pro Phe Ile Leu Thr Gly Thr  
 195 200 205  
 Gln Ser Ile Pro Ala Gly Glu Glu Ser Ser Ala Gly Glu Thr Arg Arg  
 210 215 220  
 Gln Val His Leu Ser Arg Arg Gly Glu Pro Leu Lys Gln Arg Thr Val

[illegible]

```
<210> 43614
<211> 179
<212> PRT
<213> A.fumigatus
```

|  |
|--|
| <400>  |
| His Leu Asp Asp Val His Gln Asn Leu Glu Asp Asp Arg Gln Asp Glu                |
| 1                 5                          10                      15        |
| Val Lys Asp Trp Phe Lys Val Gln Met Glu Lys Ala Lys Arg Phe Gln                |
| 20                          25                      30                         |
| Pro Leu Ala Val Leu Asn Gln Lys Leu Lys Gly Leu Asp Val Phe Glu                |
| 35                          40                      45                         |
| Ser Asn Glu Asn His His Pro Ser Val Gly Ala Ser Arg Pro Ala Gly                |
| 50                          55                      60                         |
| Ala Gln Thr Gly Asn Asn Glu Pro Pro Arg Val Leu Asp Pro Glu Asp                |
| 65                          70                      75                      80 |
| Ile Ile Thr Lys Asp His Trp Gln Val Arg Gly Leu Tyr Asp Thr Cys                |
| 85                          90                      95                         |
| Leu Glu Pro Ser Cys Gly Lys Arg Leu Asn Ala Thr Asn Gly Cys Val                |
| 100                      105                      110                          |
| Asn Cys Arg Lys Cys Gly Lys Leu Phe Cys Glu Glu His Thr Met Tyr                |
| 115                      120                      125                          |
| Gln Met Lys Leu Ser Arg Ser Ala Gln His Glu Pro Val Arg Gly Leu                |
| 130                      135                      140                          |
| Trp Tyr Arg Val Cys Glu Thr Cys Tyr Lys Ser Arg Glu Gly Tyr Asn                |
| 145                      150                      155                      160 |
| Asp His Asn Gly Arg Cys Leu Val Phe His His Arg Gly Trp Lys Glu                |
| 165                      170                      175                          |
| Thr Arg Cys  |

```
<210> 43615
<211> 160
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (153)
<223> Identity of amino acid sequences at the above locations are unknown.
```

Ser Ser Trp Trp Arg Ser Ile Val Arg Pro Leu Arg Ile Ala Ile Ile  
 1 5 10 15  
 Leu Asp Asn Ala Ala Asn Ile Arg His Ala Leu Gln Val Leu Ala Leu  
 20 25 30  
 Ser Gly Ala Pro Arg Thr Ala Phe His Gln Gly Glu Gly Pro Phe Pro  
 35 40 45

## 19692

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Glu | Lys | Met | Ser | Glu | Tyr | Leu | Arg | Asp | His | Pro | Tyr | Gly | Asp | Cys |
| 50  |     |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Leu | Leu | Tyr | Phe | Gly | Thr | Cys | Tyr | Gly | Ala | Ser | Glu | Val | Arg | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Trp | Lys | Leu | Glu | Thr | Ile | His | Arg | Glu | Phe | Met | Lys | Val | Pro | Val | Ala |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Arg | Ile | Asp | Pro | Ala | Thr | Leu | Ala | Pro | Ser | Asp | Tyr | Phe | Trp | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Asn | Arg | Thr | Ser | Ser | Gly | Glu | Pro | Asp | Leu | Glu | Glu | Leu | Ala | Trp |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Asn | Trp | Trp | Leu | Asn | Gly | Gly | His | Ile | Ala | Phe | Ser | Pro | Val | Pro |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Ile | Arg | Gly | Phe | Tyr | Pro | Ala | Xaa | Arg | Arg | Gln | Val | Arg | Cys | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |

&lt;210&gt; 43616

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (143)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43616

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Trp | Leu | Val | Ser | His | Pro | Cys | Ser | Met | Ala | Ile | Glu | Ala | Tyr | Ile |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Asp | Leu | Ile | Cys | Phe | Gly | Tyr | Arg | Asn | Thr | Asn | Gly | Thr | Leu | Asn | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Ser | Arg | Ile | His | Lys | Leu | Ala | Ile | Ser | Phe | Lys | Leu | Ala | Pro | Gly |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ala | Ser | Ala | Glu | Asn | Pro | Ser | Lys | Pro | Asn | Leu | Gln | Leu | Lys | Tyr | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Thr | Ile | Leu | Leu | Thr | Gly | Pro | Asp | Gly | Glu | Pro | Thr | Thr | Gly | Leu |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Ala | Tyr | Ala | Thr | Asp | Ser | Val | Ser | Tyr | Arg | Gly | Phe | Pro | Pro | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Pro | Ala | Ala | Thr | Tyr | Thr | Gly | Asp | Gly | Phe | Gly | Gly | Ala | Arg | Asn | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Lys | Arg | Ile | Thr | Ile | Asp | Ala | Glu | Gly | Leu | Val | Leu | Asp | Lys | Asp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Phe | Phe | Trp | Val | Ser | Asp | Glu | Tyr | Gly | Pro | Tyr | Val | Tyr | Xaa | Ser |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Lys | His | Gly | Lys |     |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43617

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (51)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43617

```

Ile Asn Asp Gly Leu Thr Pro Asp Pro Gln Asn Asp Ile Asn Ser Lys
1           5           10           15
Tyr Gly Gln Leu Pro Lys Val Lys Ser Gln Lys Arg Tyr Leu His Gly
           20           25           30
Phe Ala Gln Thr Arg Asp Val Ile Gln Ala Gln Pro Tyr Pro Val Gly
           35           40           45
Glu Asp Xaa Thr Thr Pro Asn Phe Gly Arg Leu Ser Ser Glu Asn Lys
           50           55           60
Leu Phe Ile Pro Trp Leu His Asn His Gln Ser Asp Val Phe Lys Ile
65           70           75           80

```

&lt;210&gt; 43618

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43618

```

Met Asn Glu Gln Thr Ala Gly Arg Glu Thr Arg Val Glu Met Cys Leu
1           5           10           15
Met Ser Val Ser Ala Asp Thr Asp Ala Gly Ile Asp Asp Ala Ile Cys
           20           25           30
Arg Leu Arg Val Ala Tyr Glu Ile Leu Ser Leu Ile Asn Gln Asn Met
           35           40           45
Asp His Gly Leu Met Leu Glu Leu Tyr Ser Phe Thr Val Ala Arg Pro
           50           55           60
Met
65

```

&lt;210&gt; 43619

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (284)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43619

```

His Phe His Ile Arg Gly Arg Gln His Phe Asn Gly Pro Pro Leu Gly
1           5           10           15
Gln Ile Leu Glu Ser Ile Trp Trp Ala Gly Pro Gly Lys Leu Glu Ser
           20           25           30
Trp Asn Ala Ser Lys Ile Arg Gln Lys Ala Tyr Ile Gly Leu Gly Glu
           35           40           45
Thr Thr Gly Ala Leu Glu Glu Gly Ala Lys Asp Gln Gly Ile Asn Gly
           50           55           60
Thr Ser Ser Asp Thr Trp Glu Asn Arg Ile Pro Val Ser Arg Val Thr
65           70           75           80
Thr Asp Ala Glu Gly Asn Thr Tyr Pro Glu Gly Gly Leu Glu Ala Trp
           85           90           95
Leu Gly Val Ile Gly Ser Phe Met Gly Leu Leu Ala Ser Leu Gly Val
           100          105          110
Val Asn Thr Ile Gly Thr Phe Gln Ala Tyr Leu Gln Asp His Gln Leu

```

## 19694

```

      115              120              125
Lys Glu Tyr Ser Pro Gly Asn Val Gly Trp Ile Phe Gly Val Tyr Ser
   130              135              140
Phe Leu Thr Phe Phe Cys Gly Val Gln Ile Gly Pro Val Phe Asp Ala
145              150              155              160
Lys Gly Pro Arg Phe Leu Val Leu Ala Gly Ser Ile Leu Val Met Val
              165              170              175
Met Met Ile Ala Leu Gly Phe Cys Thr Lys Tyr Trp His Phe Met Leu
              180              185              190
Val Ile Gly Ile Ala Gly Gly Thr Gly Thr Ser Leu Ile Phe Thr Pro
   195              200              205
Ala Ile Ser Ala Val Gly His Phe Phe Asn Glu Lys Arg Gly Val Ala
   210              215              220
Thr Gly Leu Ala Ala Thr Gly Gly Ser Val Gly Gly Ile Val Phe Pro
225              230              235              240
Leu Val Leu Glu Thr Leu Phe Pro Lys Ile Gly Trp Thr Trp Ala Thr
              245              250              255
Arg Val Ile Ala Leu Ile Cys Leu Ile Leu Ile Gly Ser Cys Leu
              260              265              270
Leu Val Lys Ser Arg Ser Ser Pro Thr Gly Pro Xaa Ile Ser Lys
   275              280              285

```

&lt;210&gt; 43620

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43620

```

Gly Trp Leu Leu Ala Phe Val Leu Phe Leu Thr Gly Gly Arg Ala Asn
1              5              10              15
Tyr Gln Thr Ala Ser Asp Ala Leu Gln Ala His Gly Ala Asp Ser Ala
   20              25              30
Leu Gly Ser Thr Ser Thr Ser Ser Gly Lys Pro Val Thr Leu Gln Gln
   35              40              45
Val Leu Gly Gly Gln Trp Asn Pro Arg Tyr His Ala Ile Gly Trp Val
   50              55              60
Ala Gly Pro Asn Asn Glu Asp Gly Leu Leu Val Glu Lys Gly Gly Asp
65              70              75              80
Glu Lys Gln Gly Tyr Leu Arg Val Asp Asp Ile Arg Ser Arg Lys Gly
   85              90              95
Asn Asn Thr Gly Arg Glu Ser Arg Val Leu Met Arg Lys Pro Ile Val
   100              105              110
His Val Asp Gly Gln Ala Ile Val Pro Ser Asn Val Trp Pro Ser Pro
   115              120              125
Asp Leu Lys Lys Val Leu Leu Ile Ser Glu Gln Gln Lys Asn Trp Arg
   130              135              140
His Ser Phe Thr Gly Lys Tyr Trp Val Leu Asp Val Asp Ser Gln Thr
145              150              155              160
Ala Gln Pro Leu Asp Pro Ser Ala Pro Asp Gly Arg Val His Leu His
              165              170              175
Ala Gly Leu Glu Gly Asn Ala Leu Ala Lys Phe Leu Pro Glu Gly Glu
   180              185              190

```

&lt;210&gt; 43621

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43621

```

Glu Val Leu Leu Glu Asn Pro Thr Met His Val Gln Pro Pro Ser
1          5          10          15
Glu Thr Ala Ala Val Asp Thr Thr Leu Leu Lys Asp Glu Thr Ile Thr
          20          25          30
Thr Thr Val Val Val Pro Asp Thr Pro Pro Pro Pro Thr Pro Leu Pro
          35          40          45
Leu Tyr Phe Ala Tyr Gly Ser Asn Leu Ser Phe Thr Arg Met Arg Ile
          50          55          60
Arg Cys Gly Asp Asn Pro Asp Leu Ser Ser Lys Pro Val Ala Ile Ser
65          70          75          80
Arg Leu Asp His Trp Arg
          85

```

&lt;210&gt; 43622

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43622

```

Lys Gly Ile Asp Ser Arg Asn Ala Tyr Ala Arg Val Leu Ile Asn Thr
1          5          10          15
Tyr His Ile Leu Ser Leu Lys Gln Val Tyr Thr Leu Ser Lys Val His
          20          25          30
His Lys Trp Gly Ser Ile Ala Thr Thr Pro Arg Arg Pro Tyr Cys Ser
          35          40          45
Ala Ile Ser Ser Ala Pro Ser Ile Ser Thr Phe Glu Gly Ser Arg Gln
          50          55          60
Gly Gly Ser Thr Ala
65

```

&lt;210&gt; 43623

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43623

```

Val Asn Met Thr Leu Xaa Arg Leu Lys Ala Cys Gln Gly Ile Thr Val
1          5          10          15
Ser Asp Leu Ser Pro Leu Asp Cys Gly Arg Tyr Pro Ser Gln His Val
          20          25          30
Thr Asn Arg Gln Arg Arg Ser Ser Leu Glu Ser Gln Asn Ala Phe Leu
          35          40          45
Ile Ser Asn Pro Ala Ser Asp Thr Asp Leu Asp Leu Gly Asn Leu Phe
          50          55          60
Phe Lys Ser Phe Ser Pro Ala Gly Trp Leu Gly Asn Tyr Thr Ser Tyr
65          70          75          80
Leu Phe Cys His

```

<210> 43624  
 <211> 199  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (21), (191), (192), (193), (194), (195), (196), (197), (198), (199)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43624  
 Glu Ser Asn Leu Val Ser Gln Ala Asp Thr Pro Thr Gln Asn Leu Gly  
 1 5 10 15  
 Arg Pro Ala Ile Xaa Arg Lys Arg Arg Pro Gly Arg Pro Pro Lys Asn  
 20 25 30  
 Arg Pro Pro Asp Trp Asp Leu Ala Asp Gly Ser Ala Pro Pro Pro Ala  
 35 40 45  
 His Ser Gly Thr Pro Ala Lys Arg Arg Arg Gly Arg Pro Ala Ala Ser  
 50 55 60  
 Gly Gly Arg Trp Ala Arg Asn Arg Gly Pro Ser His Val Thr Gln Val  
 65 70 75 80  
 Pro Ile Asp Lys Glu Gly Asn Met Met Asp Val Ile Asp Asp Glu Val  
 85 90 95  
 Ala Leu Pro Pro Asp Pro Glu Gly Glu Thr Lys Val Asp Lys Asn Gly  
 100 105 110  
 Val Leu Lys Asp Gly Arg Glu Tyr Arg Val Arg Thr Phe Thr Ile Leu  
 115 120 125  
 Asn Arg Gly Asp Arg Leu Tyr Met Leu Ser Thr Glu Pro Ala Arg Cys  
 130 135 140  
 Ile Gly Phe Arg Asp Ser Tyr Leu Phe Phe Gln Lys His Lys Leu Leu  
 145 150 155 160  
 Tyr Lys Ile Ile Ile Asp Asp Glu Ala Lys Arg Asp Leu Ile Asp Arg  
 165 170 175  
 Glu Ile Ile Pro His Ser Tyr Lys Gly Arg Ala Ile Val Phe Xaa Xaa  
 180 185 190  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 195

<210> 43625  
 <211> 257  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (231)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43625  
 Val Lys Thr Val Cys Arg Met His Ser Ile Ala Leu Gln Leu Glu Asn  
 1 5 10 15  
 Gly Met Arg Ile Val Gly Leu Ser Val Pro Leu Ala Asn Ala Arg Asp  
 20 25 30  
 Ile Gly Glu Trp Ile Gly Ala Asn Lys His Thr Ile Tyr Asn Phe Ser  
 35 40 45



## 19697

Pro His Ala Arg Pro Val Pro Leu Glu Leu His Ile Gln Ser Phe Ser  
 50 55 60  
 Ile Pro His Phe Pro Ser Leu Met Leu Ala Met Ala Lys Pro Ala Tyr  
 65 70 75 80  
 His Ser Ile Leu Gln Leu Ala Pro Asp Lys Pro Ala Leu Val Phe Val  
 85 90 95  
 Pro Asn Arg Lys Gln Thr Arg Ser Thr Ala Ile Asp Leu Leu Ala Ala  
 100 105 110  
 Cys Ala Ala Asp Asp Asn Glu Asp Arg Phe Leu His Ala Asp Val Asn  
 115 120 125  
 Glu Leu Ala Pro Leu Leu Asn Arg Ile Gln Glu Arg Thr Leu Ala Glu  
 130 135 140  
 Ser Leu Ser His Gly Ile Gly Tyr Tyr His Glu Ala Leu Ser Ala Thr  
 145 150 155 160  
 Asp Lys Arg Ile Val Ser His Leu Phe Thr Ile Gly Ala Ile Gln Val  
 165 170 175  
 Leu Leu Ala Ser Arg Asp Val Cys Trp Asp Leu Asn Leu Thr Ala His  
 180 185 190  
 Leu Val Ile Ile Met Gly Thr Gln Phe Phe Glu Gly Arg Glu Ala Arg  
 195 200 205  
 Tyr Ile Asp Tyr Pro Ile Ser Glu Val Leu Gln Met Phe Gly Lys Ala  
 210 215 220  
 Thr Arg Pro Lys Asp Asp Xaa Asn Gly Arg Gly Val Leu Met Val Pro  
 225 230 235 240  
 Ser Val Lys Arg Glu Leu Leu Pro Lys Arg Ser Ser Leu Thr Lys Leu  
 245 250 255  
 Trp

<210> 43626  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 43626  
 Val Met Val Gly Ile Ala Glu Ala Ile Leu Asp Tyr Gln Ser Tyr Ser  
 1 5 10 15  
 Gly Leu Arg Ala Glu Thr Met Val Met Gly Lys Ala Gln Asn Ser Leu  
 20 25 30  
 Pro Asn Glu Lys Pro His Lys Phe Val Ala Leu Ile Ile Leu Phe Leu  
 35 40 45  
 Leu Val Val Glu Lys Ile Asn Lys Thr Leu Lys Cys Cys Ala Leu  
 50 55 60

<210> 43627  
 <211> 206  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (36), (43)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43627  
 Thr Ala Thr Leu Lys Gly Gln Asp Val Val Val Asn Thr Val Gly Thr

## 19698

```

1           5           10           15
Ile Pro Arg Asp Ile His Leu Arg Leu Ile Asp Ala Ala Ile Ala Ala
20           25           30
Gln Val Arg Xaa Phe Ile Pro Ser Glu Phe Xaa Ser Asp Thr Thr Asn
35           40           45
Pro Thr Ala Ala Lys Leu Pro Val Tyr Gln Asp Lys Val Ala Ile Gln
50           55           60
Lys Tyr Leu Gln Gln Lys Ala Ala Glu Ser Ala Gly Ser Phe Ser Tyr
65           70           75           80
Thr Leu Met Ile Asn Gly Pro Phe Leu Asp Trp Gly Leu Thr Val Gly
85           90           95
Phe Leu Leu Asn Trp Arg Gly Pro Glu Val Glu Leu Tyr Asp Glu Gly
100          105          110
Glu Arg Lys Phe Ser Ala Thr Thr Leu Ala Gly Ile Ala Lys Gly Val
115          120          125
Val Gly Ile Ile Asn Asn Leu Glu Ala Thr Thr Asn Arg Thr Val Tyr
130          135          140
Ile Arg Glu Ile Glu Val Ser Gln Ser Glu Leu Leu Lys Leu Ser Gly
145          150          155          160
Lys Gln Leu Pro Thr Lys Ser Ile Ser Thr Glu Glu Leu Glu Lys Glu
165          170          175
Gly Tyr Ala Glu Leu Ala Lys Pro Asn Pro Asn Pro Arg Ala Val Ala
180          185          190
Leu Asn Phe Arg Leu His Thr Arg Arg Glu Gly Thr Thr Ser
195          200          205

```

&lt;210&gt; 43628

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (73)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43628

```

Asn Asp Asn Gln Lys Leu Trp Ile Asn Met Val Pro Lys Glu Val Ser
1           5           10           15
Asp Ser Ile Asp Asp Arg Glu Lys Lys Arg Gln Glu Ile Ile Phe Glu
20           25           30
Ile Met Tyr Thr Glu Arg Asp Phe Val Lys Asp Leu Glu Tyr Leu Arg
35           40           45
Asp Phe Trp Met Arg Pro Leu Arg Ala Ala Gly Asn Ala Asn Gln Ser
50           55           60
Pro Ile Pro Glu His Arg Arg Glu Xaa Phe Ile Arg Thr Val Phe Gly
65           70           75           80
Asn Cys Leu Glu Val Leu Lys Val Asn Gly Ala Leu Cys Glu Ala Leu
85           90           95
Asn Ser Arg Gln Lys Glu Ser Pro Val Val Lys Thr Val Gly Asp Ile
100          105          110
Phe Leu Gln His Val Pro Asn Phe Asp Pro Phe Ile Lys Tyr Gly Ala
115          120          125
Asn Gln Leu Tyr Gly Lys Tyr Glu Phe Glu Lys Glu Lys Ala Ser Asn
130          135          140
Pro Ala Phe Ala Arg Phe Val Glu Glu Thr Glu Arg Leu Lys Glu Ser

```

## 19699

145                      150                      155                      160  
 Arg Lys Leu Glu Leu Asn Gly Tyr Leu Thr Lys Pro Thr Thr Arg Leu  
                                  165                      170                      175  
 Ala Arg Tyr Pro Leu Leu Leu Ala Gln Val Val Lys Ile Val Gln Gln  
                                  180                      185                      190  
 Pro Gln Lys Ser Asn Ser  
                                  195

&lt;210&gt; 43629

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (2), (4), (5), (10)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43629

Xaa Xaa Val Xaa Xaa Arg His Pro Pro Xaa Thr Pro Leu Lys Gly Pro  
 1                      5                      10                      15  
 Pro His Gln Pro Met Leu Ser Gly Thr Pro Ser Pro Pro Gly Ser Ala  
                                  20                      25                      30  
 Ser Ser Val Asp Val Ile Ser Ser Pro Pro Ser Pro Glu Asp Asn Pro  
                                  35                      40                      45  
 Phe Ser Pro Ala Gln Ser Thr Ala Thr Asp Ile Thr Asp Asp Tyr Gly  
                                  50                      55                      60  
 Trp Gln Thr Pro Thr Lys Gly Gln Ala Leu Ser Thr Ala Thr Asp Lys  
 65                      70                      75                      80  
 Asp Cys Leu Glu Ser Ser Gln Ser Glu Glu Glu Asp Asp Ser Ala Gly  
                                  85                      90                      95  
 Asp Asp Gly Gly Asp Asp Glu Gly Asp Asp Glu Gly Asp Asp Glu Gly  
                                  100                      105                      110  
 Asp Asp Glu Gly Asp Asp Gly Gly Asp Asp Arg Ala Gly His Ile  
                                  115                      120                      125  
 Ala Ser Ala Phe Asn Ala Pro Ser Pro Thr Lys Pro Leu Glu Arg Ser  
                                  130                      135                      140  
 Lys Lys Ala Lys Ser Leu Arg Pro Arg Ile Ser Ile Ser Ser Leu Arg  
 145                      150                      155                      160  
 Ser Glu Asp Ala Thr Lys Ser Val Leu Ile Lys Arg Lys Glu Ser Ser  
                                  165                      170                      175  
 Thr Ser Pro Val Asp Thr Cys Ala Trp Val Leu Glu Gln Gly Lys Phe  
                                  180                      185                      190  
 Ser Glu Gly Leu Thr Trp Pro Ser Ile Leu Ile Gly Gln Lys Ile Arg  
                                  195                      200                      205  
 Lys Arg Ser Arg His Ile Arg Leu Glu Tyr Trp Thr Ser Glu Gln Ala  
                                  210                      215                      220  
 Ser Asn Ile His Ser Gly Phe Phe Cys Leu Lys Gly Ile Gly Ser  
 225                      230                      235

&lt;210&gt; 43630

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43630

## 19700

Cys Asp Met Pro Cys Ser Ile Ile Val Thr Pro Ile Val Thr Leu Ile  
 1 5 10 15  
 Val Thr Leu Ile Val Thr Leu Ile Val Thr Leu Ile Val Thr Pro Ile  
 20 25 30  
 Val Thr Arg Gly Val Val Leu Phe Phe Ala Leu Gly Gly Leu Glu Ala  
 35 40 45  
 Val Leu Ile Cys Cys Arg Arg Gln Cys Leu Ala Leu Gly Trp Ser Leu  
 50 55 60  
 Pro Ala Ile Val Ile Arg Asp Ile Gly Gly Gly  
 65 70 75

&lt;210&gt; 43631

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43631

Ile Leu Ala Val Pro Glu Asn Asn Trp Asn Pro Lys Trp Glu Phe Pro  
 1 5 10 15  
 Arg Ser Asn Lys Pro Ser Lys Gly Ala Pro Arg Phe Gln Glu Pro Ile  
 20 25 30  
 Pro Phe Arg Gln Lys Asn Pro Glu Trp Met Leu Leu Ala Cys Ser Glu  
 35 40 45  
 Val Gln Tyr Ser Ser Arg Ile Trp Arg Asp Arg Phe Arg Ile Phe Cys  
 50 55 60  
 Pro Ile Ser Met Asp Gly His Val Asn Pro Ser Glu Asn Phe Pro Cys  
 65 70 75 80  
 Ser Arg Thr His Ala Gln Val Ser Thr Gly Asp Val Glu Leu Ser Phe  
 85 90 95  
 Arg Leu Ile Asn Thr Asp Leu Val Ala Ser Ser Glu Arg Arg Glu Glu  
 100 105 110  
 Met Leu Ile Arg Gly Leu Lys Leu Phe Ala Phe Phe Asp Arg Ser Asn  
 115 120 125  
 Gly Phe Val Gly Glu Gly Ala Leu Lys Ala Asp Ala Ile Cys Pro Ala  
 130 135 140  
 Arg Ser Ser Ser Pro Pro Ser Ser Pro Ser Ser Ser Pro Ser Ser Ser  
 145 150 155 160  
 Pro Ser Ser Ser Pro Ser Ser Ser Pro Pro Ser Ser Pro Ala Glu Ser  
 165 170 175  
 Ser Ser Ser Ser Leu Trp Glu Asp Ser Arg Gln Ser Leu Ser Val Ala  
 180 185 190  
 Val Asp Asn Ala Trp Pro Leu Val Gly Val Cys Gln Pro  
 195 200 205

&lt;210&gt; 43632

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (36)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43632

Pro Ile Pro Glu Arg Trp Lys Phe Gly Ile Val Leu Arg Ile Leu Ala

## 19701

```

1           5           10           15
Ser Leu Ala Ile Val His Ile Pro Gly Pro Arg Arg Asp Val Trp Tyr
20           25           30
His Ala Glu Xaa Leu Phe Val Val Phe Phe Phe Tyr Gly Leu Cys Thr
35           40           45
Thr Ile Leu Ser Tyr Val Val Ser Phe Val Ser Lys Ser Gln Leu Ala
50           55           60
Ala Phe Ala Ile Ala Ala Gly Gly Gln Cys Val Leu Phe Leu Ile Tyr
65           70           75           80
Phe Ile Ser Tyr Met Ser Val Leu Thr Tyr Ala Pro Thr Gln Lys Val
85           90           95
Asp Glu Tyr Leu Glu Ile Thr His Phe Thr Ile Gly Leu Ile Ala Pro
100          105          110
Ser Gly Asn Leu Leu Arg Ala Met Phe Thr Ser Leu Asn Thr Phe Ser
115          120          125
Ile Leu Cys Arg Gly Arg Glu Ile Ala Ser Tyr Pro Gly Glu Ile Thr
130          135          140
Leu Tyr Gly Gly Pro Ile Leu Tyr Leu Ile Cys Gln Ser Phe Phe Leu
145          150          155          160
Phe Gly Leu Leu Leu Trp Ile Asp Gly Gly Pro Val Leu Ser Met Met
165          170          175
Arg Arg Lys Val Lys Gln Asp His Val Glu Glu Lys Asn Thr Val Asp
180          185          190
Gly Asp Val Ala Ala Glu Leu Ala Arg Val Glu Gly Ser Thr Asp Gly
195          200          205
Leu Arg Val Leu His Leu Thr Lys Lys Phe Lys Lys Ser Val Ala Val
210          215          220
Asp Asp Val Thr Phe Gly Val Pro Lys Ser Gln Val Phe Ala Leu Leu
225          230          235          240
Gly Pro Asn Gly Ala Gly Glu Asn Val Phe Thr Thr Arg Gly Ser Pro
245          250          255
Gly Ser Ala Leu Val
260

```

&lt;210&gt; 43633

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43633

```

Asn Glu Thr Val Ser Ser Ser Leu Ala Leu Phe Ala Ile His Asn Leu
1           5           10           15
Ile Arg Arg Asn Leu Lys Ala Cys Ala Glu His Ala Ile Thr Val Gln
20           25           30
Pro Ala Asn Ile Asp Ala Phe Val Thr Tyr Ala Lys Tyr Thr Leu His
35           40           45
Val Leu Arg Asp Gln Leu Thr Ser Val Asp Glu Ile Trp Phe Pro Val
50           55           60
Phe Ala Glu His Asp Pro Arg Phe Leu Ala Gln Lys Asp Ala His Asp
65           70           75           80
Ala Leu Tyr His Arg
85

```

&lt;210&gt; 43634

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43634

```

Ser Thr Asp Thr Arg Met Ser Gly Ser Thr Met Ser Pro Ser Ile Ser
1          5          10          15
Thr Gln Gln Asp Glu Glu Lys Ala Ile Gln Pro Pro Val Val Ser Asp
          20          25          30
Ser Pro Ala Leu Glu Ser Ala Leu Pro Pro Glu Gly Gly Leu Arg Gly
          35          40          45
Trp Leu Cys Cys Ala Gly Gly Ser Leu Gly Leu Phe Ala Thr Leu Gly
          50          55          60
Phe Leu Asn Ala Leu Ser Pro Ser Phe Arg
65          70

```

&lt;210&gt; 43635

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43635

```

Lys Ser Ser Gly Arg Thr Cys Arg Thr Thr Ser Ala Phe Gln Pro Ile
1          5          10          15
Ala Pro Arg Pro Ser Leu Asp Ser Ala Thr Pro Thr Asn Pro Ala Ala
          20          25          30
Ser His Ala Ala Ile Ser Pro Pro Leu Gly Ser Arg Pro Ser Ala Ala
          35          40          45
Gly Ala Val Pro Ala Arg Pro Gly Leu Ser Pro Arg Pro Arg Ser Ser
          50          55          60
Thr Glu Thr Asp Pro Gln Leu Gly Met Ser Gln Ser Pro Gly Tyr Thr
65          70          75          80
Ser Gly Asp Ser Tyr Ala Gln Arg Pro Pro Gln Ala His Pro Gly Ala
          85          90          95
Arg Ser Thr Thr Pro Ala Leu Pro Val Pro Leu Pro Val Phe Thr Thr
          100          105          110
Ala Ala

```

&lt;210&gt; 43636

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43636

```

Phe Trp Asn Gly Ser Ser Lys Pro Gly Leu Cys Leu Asp Ala Asp Ile
1          5          10          15
Phe Ile Ala Ile Ala Tyr Thr Tyr Ser Val Gly Ala Val Ile Thr Asp
          20          25          30
Phe Thr Ile Gly Ile Leu Pro Val Phe Ile Ile Trp Ser Leu Arg Met
          35          40          45
Asn Thr Arg Thr Lys Met Ala Ile Ala Gly Ile Leu Gly Ile Gly Cys
          50          55          60
Ile Ala Ser Ala Ala Val Ile Val Arg Ile Pro Phe Val His Asn Tyr
65          70          75          80
Lys Asp Pro Asp Phe Phe Tyr Ala Thr Tyr Gln Val Arg Arg Ser Leu
          85          90          95
Arg Gly

```

<210> 43637  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 43637  
 Gly Phe Pro Thr Leu Phe His Leu Gly Ser Ser Leu His Ser Pro Ser  
 1 5 10 15  
 Glu Thr Tyr Ser Ser Ala Gln Leu Leu Leu Gly Val Lys Asp Lys Glu  
 20 25 30  
 Ser Ser Ala Tyr Leu Val Tyr Phe Cys Ser Phe Ile Ser Thr Asn Ser  
 35 40 45  
 Thr Arg Ser Ile Ser Pro Ser Ala Phe Gln Gln His  
 50 55 60

<210> 43638  
 <211> 67  
 <212> PRT  
 <213> A.fumigatus

<400> 43638  
 Ile Met Phe Arg Ile Leu Ser Arg Glu Phe Asn Asp Phe Leu Tyr Leu  
 1 5 10 15  
 Ser Tyr Met Cys Ser Gln Gly Glu Glu Ala Gly Asp Gly Ile Tyr Ile  
 20 25 30  
 Thr Trp Gly Phe Leu Phe Ile Lys Ser Arg Gln Lys Ser Tyr Leu Ala  
 35 40 45  
 Arg Ile Asp Pro Tyr Gln Leu Trp Met Ser Ser Thr Arg Val Glu Ile  
 50 55 60  
 Asn Ile Ser  
 65

<210> 43639  
 <211> 154  
 <212> PRT  
 <213> A.fumigatus

<400> 43639  
 Cys Leu Asp Leu Asp Asp Gln Gly His Trp Asp Tyr His Gly His Thr  
 1 5 10 15  
 Ser Gly Ile Ile Phe Leu Arg Arg Leu Arg Lys Gln Leu Gly Ala Ser  
 20 25 30  
 Asp Met Pro Val Pro Ser Leu Arg Thr Arg Val Leu Ser Gln Met Leu  
 35 40 45  
 Glu Ser Pro Lys Ser Thr Ser Glu Ser Pro Ser Asp Ser Thr Leu Pro  
 50 55 60  
 Pro Thr His Asp Leu Pro Ser Arg Asp Val Ala Gln Arg Leu Cys His  
 65 70 75 80  
 His Ala Leu Tyr Asp Gly Cys Ser Leu Met Arg Phe Val His Glu Pro  
 85 90 95  
 Ser Phe Phe Ala Met Leu Asp Arg Ile Tyr Asp Thr Pro Pro Glu Gln  
 100 105 110  
 Phe Gly Asn Glu Glu Asn Ser Phe Leu Pro Leu Leu Tyr Ile Val Met  
 115 120 125

## 19704

Ser Val Gly Cys Leu Phe Ser Asp Glu Arg Ala Gly Thr Leu Asp Thr  
 130 135 140  
 Ala Gly Tyr Glu Cys Ala Ile Gly Gln Trp  
 145 150

<210> 43640

<211> 159

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (1)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43640

Xaa Ala Asp Leu Glu Glu Tyr Gly Met Val Leu Tyr Ile Ala Asp  
 1 5 10 15  
 Thr Asn Val Ser Ser Pro Trp Thr Gln Thr Cys Ile Thr Gln Ala Asp  
 20 25 30  
 Cys Ile Leu Leu Val Gly Leu Ala Glu Ser Ser Pro Ser Ile Gly Glu  
 35 40 45  
 Tyr Glu Arg Phe Leu Leu Gly Met Lys Thr Thr Ala Arg Lys Glu Leu  
 50 55 60  
 Val Leu Leu His Ala Glu Arg Tyr Cys Pro Pro Gly Leu Thr Arg Arg  
 65 70 75 80  
 Trp Leu Lys Asn Arg Val Trp Ile Asn Gly Gly His His His Ile Gln  
 85 90 95  
 Met Ala Phe Arg Leu Thr Ala Glu Pro Thr His Pro Glu Thr Lys Arg  
 100 105 110  
 Phe Gly Thr Val Leu Lys Gln Arg Val Gln Val Leu Gln Ala Glu Ile  
 115 120 125  
 Gln Lys Tyr Thr Ser Arg Arg Ile Arg Gln Thr Pro Leu Tyr Ser Ala  
 130 135 140  
 Gln Ser Pro Phe Lys Gly Asp Phe His Arg Leu Ala Arg Arg Leu  
 145 150 155

<210> 43641

<211> 217

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (160)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43641

Arg Pro Thr Leu Phe Arg Pro Leu Gln Ile Arg Asn Val Thr Leu Lys  
 1 5 10 15  
 Asn Arg Ile Met Val Ser Pro Met Cys Met Tyr Ser Cys Glu Ser Asp  
 20 25 30  
 Pro Ser Ser Pro His Val Gly Ala Leu Thr Asn Tyr His Leu Ala His  
 35 40 45  
 Leu Gly His Leu Ala Leu Lys Gly Ala Gly Leu Val Phe Ile Glu Ala  
 50 55 60



## 19705

Thr Ala Val Gln Pro Asn Gly Arg Ile Ser Pro Asn Asp Ser Gly Leu  
 65 70 75 80  
 Trp Gln Asp Gly Thr Thr Ser Glu Gln Phe Leu Gly Leu Lys Arg Val  
 85 90 95  
 Val Glu Phe Met His Ala Gln Gly Ala Lys Val Gly Ile Gln Leu Ala  
 100 105 110  
 His Ala Gly Arg Lys Ala Ser Ala Val Ala Pro Trp Leu Ala Ala Gln  
 115 120 125  
 Ala Gly Lys Ser Ser Leu Lys Ala Asp Glu Ser Val Gly Gly Trp Pro  
 130 135 140  
 Ala Asp Val Val Gly Pro Ser Gly Gly Glu Glu His Ile Phe Ser Xaa  
 145 150 155 160  
 Glu Glu Asp Ala Tyr Trp Val Pro Arg Ala Leu Ser Thr Ala Glu Val  
 165 170 175  
 Arg Glu Val Val Ala Ala Phe Ala Lys Ser Ala Arg Leu Ala Val Gln  
 180 185 190  
 Ala Gly Val Asp Val Ile Glu Ile His Gly Ala His Gly Tyr Leu Ile  
 195 200 205  
 Asn Glu Phe Leu Ser Pro Val Thr Lys  
 210 215

&lt;210&gt; 43642

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (17), (20), (22), (26), (40), (44), (53), (54), (56), (76)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43642

Ala Arg Ser Arg Asn Ser Gly Arg Met Ser Thr Val Gly Ala Leu Lys  
 1 5 10 15  
 Xaa Gly Thr Xaa Ile Xaa Arg Lys Val Xaa Ala Ala Ile Arg Ala Val  
 20 25 30  
 Asn Pro Glu Gly Asn Ala Leu Xaa Leu Arg Phe Xaa Arg Thr Glu Leu  
 35 40 45  
 Val Gly Gly Ser Xaa Xaa Trp Xaa Pro Asn Arg Ala Thr Gly Ile Phe  
 50 55 60  
 Lys Pro Pro Trp Asn Leu Val Lys Lys Leu Pro Xaa Met Gly His  
 65 70 75

&lt;210&gt; 43643

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43643

Val Phe Xaa Asp Ala Cys Pro Ser Ser Pro Ala Val Lys Thr Tyr Ala  
 1 5 10 15

## 19706

Leu Pro Ala Leu Thr Asn Pro Gln Cys Asp Ala Gln Glu Pro His His  
                   20                  25                  30  
 Gly Val Ala His Val His Val Leu Leu Arg Val Gly Pro Val Val Ser  
                   35                  40                  45  
 Pro Arg Arg Arg Pro Asn Lys Leu Pro Pro Gly Ala Ser Gly Pro Pro  
                   50                  55                  60  
 Arg Pro Gln Arg Arg Arg Pro Arg Leu His Arg Ser His Arg Arg Ala  
                   65                  70                  75                  80  
 Ala Gln Arg Ala His Leu Pro Gln Arg Leu Gly Pro Leu Ala Gly Arg  
                   85                  90                  95  
 His His Leu Gly Thr Ile Pro Gly Ala Glu Ala Gly Arg Arg Val His  
                   100                  105                  110  
 Ala Arg Ala Gly Arg Gln Gly Arg Asp Pro Ala Cys Ala Cys Gly Pro  
                   115                  120                  125  
 Glu Ser Glu Cys Arg Cys Ala Val Ala Gly Gly Ala Gly Gly Gln Val  
                   130                  135                  140  
 Glu Ser Glu Gly Gly  
 145

&lt;210&gt; 43644

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (29)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43644

Pro Arg Ala Phe Arg Lys Arg Arg His His Leu Thr Asp Phe Gly Arg  
   1                  5                  10                  15  
 Ala Gln Arg Pro Arg His Pro Ile Arg Ile Phe Phe Xaa Thr Lys Asp  
                   20                  25                  30  
 Met Leu Phe Pro Ala Arg Arg Thr His His Ile Arg Gly Pro Pro Ala  
                   35                  40                  45  
 Asn Ala Phe Ile Arg Leu Gln Thr Arg Leu Ala Arg Leu Arg Arg Gln  
                   50                  55                  60  
 Pro Arg Arg Asn Gly Thr Arg Phe Pro Ala Arg Met Arg Lys Leu Asp  
                   65                  70                  75                  80  
 Pro Asp Leu Gly Ala Leu Arg Val His Glu Leu Asp Asp Pro Leu Gln  
                   85                  90                  95  
 Pro Gln Glu Leu Phe Arg Gly Gly Ala Val Leu Pro Glu Ala Arg Val  
                   100                  105                  110  
 Val Gly Gly Asp Ala Pro Val Gly Leu His Gly Gly Gly Phe Asp Glu  
                   115                  120                  125  
 Asp Glu Ala Cys Ala Phe Glu Gly Glu Val Ala Gln Met Arg Gln Val  
                   130                  135                  140  
 Val Val Cys  
 145

&lt;210&gt; 43645

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

<220>  
 <221> UNSURE  
 <222> (46)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43645  
 Pro Cys Ala Pro Trp Ile Ser Ile Thr Ser Thr Pro Ala Cys Thr Ala  
 1 5 10 15  
 Ser Arg Ala Leu Phe Ala Asn Ala Ala Thr Thr Ser Arg Thr Ser Ala  
 20 25 30  
 Val Leu Ser Ala Arg Gly Thr Gln Tyr Ala Ser Ser Ser Xaa Leu Lys  
 35 40 45  
 Ile Cys Ser Ser Pro Pro Asp Gly Pro Thr Thr Ser Ala Gly His Pro  
 50 55 60  
 Pro Thr Leu Ser Ser Ala Phe Arg Leu Asp Leu Pro Ala Cys Ala Ala  
 65 70 75 80  
 Ser His Gly Ala Thr Ala Leu Ala Phe Arg Pro Ala Cys Ala Ser Trp  
 85 90 95  
 Ile Pro Thr Leu Ala Pro Cys Ala Cys Met Asn Ser Thr Thr Arg Phe  
 100 105 110  
 Ser Pro Arg Asn Cys Ser Glu Val Val Pro Ser Cys Gln Arg Pro Glu  
 115 120 125  
 Ser Leu Gly Glu Met Arg Pro Leu Gly Cys Thr Ala Val Ala Ser Met  
 130 135 140  
 Lys Thr Arg Pro Ala Pro Leu Arg Ala Arg Trp Pro Arg Cys Ala Arg  
 145 150 155 160  
 Trp

<210> 43646  
 <211> 261  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (31), (33), (35), (53), (257)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43646  
 Arg Glu Gly Val Phe Val Gly Pro Ile Cys Leu Leu Pro Asp Arg Thr  
 1 5 10 15  
 Lys Ala Gln Arg Arg Leu Asp Arg Arg Pro Phe Ala Asn Pro Xaa Gly  
 20 25 30  
 Xaa Ser Xaa Phe Pro Leu Gln His Val Leu Lys Thr Ser Leu Gln Ser  
 35 40 45  
 Ala His Val Arg Xaa Gly Ser Phe Thr Ser Leu Ser Ser Ser Val His  
 50 55 60  
 Ser Leu Ser His Pro Pro Leu Pro Val Asp His Arg Glu Ala Ile Met  
 65 70 75 80  
 Ala Ala Glu Lys Lys Ser Leu Glu Gln Gln Pro Ser Ser Pro Gly Leu  
 85 90 95  
 Met Gly Pro Pro Leu Ala Pro Ala Ser Ala Tyr Arg Ser Asn Ser Thr  
 100 105 110  
 Gln Arg Pro Leu Thr Pro Asn Glu Ser Gly Thr Gln Val Tyr Ser Ser  
 115 120 125

## 19708

Lys Thr Ser Ile Ser Arg Ala Gln Ile Arg Arg Glu Ser Gln Val Ser  
 130 135 140  
 Arg Arg Ser Ser Val Ser Ser Phe Ala Ser Glu Leu Glu Glu Arg Phe  
 145 150 155 160  
 Asn Ile Gln Ala Tyr Ser Asn His Met Ser Asn Gly Tyr Ala Ala Gly  
 165 170 175  
 Thr Asp Pro Arg Met Ile Gln Ala Ile Thr Gln Thr Met Ile Gly Glu  
 180 185 190  
 Phe Leu Trp Lys Tyr Thr Arg Arg Thr Val Thr Gly Glu Thr Ser Lys  
 195 200 205  
 Thr Arg His Arg Arg Tyr Phe Trp Val His Pro Tyr Thr Arg Thr Leu  
 210 215 220  
 Tyr Trp Ser Glu Gln Asp Pro Gln Thr Ala Gly Lys Asn Gln Leu Arg  
 225 230 235 240  
 Thr Lys Ser Val Pro Ile Asp Leu Asn Arg Gly Ile Glu Ala Gly Val  
 245 250 255  
 Xaa Lys Ser Ser Gln  
 260

&lt;210&gt; 43647

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (2), (10), (34), (48), (57), (65), (67), (69), (78)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43647

Xaa Xaa Thr Pro Lys Gly Lys Asn Pro Xaa Leu Ala His Pro Ala Pro  
 1 5 10 15  
 Pro Lys Gly Ala Ile Gly Thr Lys Asn Leu Leu Gly Pro Pro Lys Pro  
 20 25 30  
 Gly Xaa Lys Thr Pro Leu Pro Pro Gly Pro Gly Gly Ile Trp Xaa  
 35 40 45  
 Gly Lys Pro Lys Phe Ser Lys Ile Xaa Pro Lys Asn Pro Pro Phe Ser  
 50 55 60  
 Xaa Gly Xaa Trp Xaa Thr Pro Ser Thr Arg Lys Pro Ile Xaa Tyr Lys  
 65 70 75 80  
 Ile Phe Asn Asn Asn Cys Pro Arg Leu Leu Ala Lys Pro Gly Ser Thr  
 85 90 95  
 Val Tyr Lys Arg Ala Gly Phe Ala Arg His Ala Leu Trp Val Leu Pro  
 100 105 110  
 Tyr Arg Asp His Glu Ile Phe Pro Ala Gly Gln Tyr Val Cys Gln Ser  
 115 120 125  
 Thr Gly Glu Glu Asn His Pro His Asn Pro Thr Ile Val Asp Trp Ala  
 130 135 140  
 Ala Arg Asn Glu Ser Ile Glu Asn Thr Asp Ile Val Cys Tyr Ile Gln  
 145 150 155 160  
 Phe Gly Leu Thr His Phe Pro Arg Thr Glu Asp Leu His His Gly Ala  
 165 170 175  
 Gly Arg Thr Arg Val Arg Val  
 180

&lt;210&gt; 43648

## 19709

<211> 111  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (40), (46)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43648

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Val | Tyr | Ser | Gln | Ser | Ile | Ile | Pro | Leu | Leu | Leu | Met | Leu | Ile | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Arg | Phe | Pro | Pro | Val | Leu | His | Glu | Trp | Phe | Val | Glu | Met | Phe | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Thr | Gly | Ala | Trp | Phe | Ala | Xaa | Arg | Leu | Arg | Tyr | Thr | Xaa | Ser | Cys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Val | Met | Ser | Met | Val | Gly | Tyr | Val | Leu | Gly | Tyr | Ala | Val | Leu | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Cys | Arg | Leu | Arg | Ile | Val | Asn | Tyr | Val | Leu | Thr | Ser | Glu | Ser | Arg | Arg |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Leu | Gly | Asp | Arg | His | Gly | Glu | Asn | Ile | Leu | Phe | Glu | Glu | Gly | Thr | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Val | Ile | His | Val | Asp | Phe | Asn | Cys | Leu | Phe | Asp | Lys | Val | Arg |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

<210> 43649  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 43649

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Gly | Met | Gly | Pro | Asn | Ser | Gly | Phe | Trp | Asn | Val | Lys | Pro | Cys | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | Gln | Ser | Arg | Ala | Phe | Gly | Gln | Arg | Lys | Val | Ser | Pro | Tyr | Leu | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Lys | Ala | Ile | Glu | Ile | Asn | Met | Tyr | Asn | Thr | Thr | Cys | Ala | Phe | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Gln | Asp | Ile | Phe | Ala | Met | Pro | Val | Ser | Gln | Ser | Ala | Arg | Leu |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

<210> 43650  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (86)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43650

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Gln | Val | Arg | Asn | Cys | Ser | Trp | Ile | Gln | Gly | Phe | Ser | Arg | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Leu | Ser | Ser | Ala | Val | Leu | Glu | Thr | Asn | Asn | Val | Thr | Trp | Ala | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Cys | Thr | Ser | Trp | Ala | Ala | Met | His | Asp | Ser | Pro | Pro | Leu | Leu | Lys | Ala |

## 19710

|                         |                     |                     |
|-------------------------|---------------------|---------------------|
| 35                      | 40                  | 45                  |
| His Thr Ser Gln Phe His | Ala Ser Leu Phe Thr | Phe Glu Pro Thr Gln |
| 50                      | 55                  | 60                  |
| Val Gly Ile Leu Leu Gly | Leu Pro Asn Tyr Phe | Pro Gly Val Gly Val |
| 65                      | 70                  | 75                  |
| Glu Gly Lys Arg Leu Xaa | Pro Arg Glu Ser Lys | Asp Pro Arg         |
| 85                      | 90                  |                     |

&lt;210&gt; 43651

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43651

|                     |                     |                             |
|---------------------|---------------------|-----------------------------|
| Gln Gly Arg His     | Gly Xaa Gln Glu Asp | Ile Lys Pro Phe Leu Thr Leu |
| 1                   | 5                   | 10                          |
| Ala Leu Asp Ile Cys | Glu Gln Thr Pro Gly | Pro Glu Ser Ala Gln Leu     |
| 20                  | 25                  | 30                          |
| Leu Ala Asp Ile His | Tyr Gly Leu Ala Ala | Ala Asn Glu Thr Asn         |
| 35                  | 40                  | 45                          |
| Asp Gly Ala Ala Cys | Leu Ser His Thr Glu | Gln Leu Leu Lys Leu Arg     |
| 50                  | 55                  | 60                          |
| Leu Glu Thr Ser Ser | Ser Thr Gly Lys Asn | Asp Ile Arg Leu Ala Ile     |
| 65                  | 70                  | 75                          |
| Ala His Asn Glu Tyr | Gly Ile Ala Leu Val | Met Asn Asn Glu Tyr Glu     |
| 85                  | 90                  | 95                          |
| Lys Ser Ile Ala Phe | Lys Thr Ser Ile Asp | Val Tyr Arg Gly Leu         |
| 100                 | 105                 | 110                         |
| Leu Asp Tyr Trp Pro | Ser Met Asp Thr Asn | Pro Arg Thr Asn Met Ser     |
| 115                 | 120                 | 125                         |
| Phe Thr Phe Trp Val | Met Gly Asp Leu Asp | Gln Ala Trp Gln Thr Leu     |
| 130                 | 135                 | 140                         |
| Arg Asp Leu Leu Ser | Asp Arg Glu Thr Lys | Phe Gly Val Asn Asp Arg     |
| 145                 | 150                 | 155                         |
| Glu Ser Tyr Lys Tyr | Val Asp Ser His Gln | Arg Leu                     |
| 165                 | 170                 |                             |

&lt;210&gt; 43652

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43652

|                     |                     |                         |
|---------------------|---------------------|-------------------------|
| Gly Val Ser Ser Thr | Gly Gly Tyr Arg Gln | Thr His Leu Phe Tyr Ser |
| 1                   | 5                   | 10                      |
| Lys Ile Gly Phe Gly | Lys Pro Asn Leu Gly | Lys Val Pro Ile Phe Asp |
| 20                  | 25                  | 30                      |
| Gly Gly Arg Lys Thr | Lys Gly Gly Lys Gly | Asp Lys Gln Glu Ile     |
| 35                  | 40                  | 45                      |
| Trp Gln Phe Leu Trp | Met Ala Asn Tyr Pro | Arg Arg Ala Leu Ile Leu |
| 50                  | 55                  | 60                      |

## 19711

Val Arg Val Leu Ser Gly Ala Lys Ser Trp Ile Ser Phe Lys Met Gly  
 65 70 75 80  
 His Gly Ser Lys Gln Met Met Ala Lys Pro Gly Gly Thr Leu Tyr Gln  
 85 90 95  
 Phe Cys Ala His Asp Lys Phe His Glu Phe Arg Val Pro Thr Asn Ala  
 100 105 110  
 Asp Val Ser Gln His Thr Cys Thr Thr Pro Cys His  
 115 120

&lt;210&gt; 43653

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43653

Cys Ala Val Pro Leu Pro Ser Asn Thr Thr Pro Lys Ile Lys Asn Glu  
 1 5 10 15  
 Gly Arg Lys Arg Pro Tyr Asn Asp Pro Lys Ser Ile Gln Val Thr Phe  
 20 25 30  
 His Ile Cys Asn Asn Val Ala Leu Gln Gly Glu Ala Phe Val Ser Ser  
 35 40 45  
 Asp Ser Met Leu Ser Ser Tyr Thr Asp Gly Asp Gly Thr Tyr Ala Ser  
 50 55 60  
 Asn  
 65

&lt;210&gt; 43654

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (4)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43654

Val Phe Xaa Xaa Trp Arg Gly Ser Phe Gln Pro Arg Val Lys Thr Asn  
 1 5 10 15  
 Ser Arg Arg Arg Gly Ser Ser Pro Asp Thr Ser Arg Thr Asp Lys Asn  
 20 25 30  
 Glu Pro Thr Ala Asp Ser Ala Lys Ala Arg Lys Ser Arg Asp Asp Arg  
 35 40 45  
 Arg Leu Ser Arg Ser Arg Asp Arg Asp Asp Glu Arg Arg Arg Arg Arg  
 50 55 60  
 Ser Thr Arg Ser Val Ser Arg Ser Arg Ser Arg Ser Arg Gly Arg Ser  
 65 70 75 80  
 Arg Thr Gly Ser Val Ser Pro Arg Arg Ala Ser Arg Ser Arg Ser Arg  
 85 90 95  
 Ser Tyr Gly Arg Glu Arg Lys Arg Arg Ser Ile Glu Arg Tyr Ala  
 100 105 110  
 Pro Ala Ala Arg Arg Arg Arg Asn Thr Ser Ser Val Ser Thr His Thr  
 115 120 125  
 Glu Lys Arg Gln Arg Met Ala Glu Ser Ser Gln Glu Ile Pro Lys Arg  
 130 135 140  
 Ser Ser Ser Pro Ala Glu Gln Ala Ser Phe Thr Asp Tyr Asp Pro Lys

[illegible]

```
<210> 43655
<211> 93
<212> PRT
<213> A.fumigatus
```

```
<210> 43656
<211> 61
<212> PRT
<213> A.fumigatus
```

```
<220>  
<221> UNSURE  
<222> (5),(15)  
<223> Identity of amino acid sequences at the above locations are unknown.
```

```
<210> 43657
<211> 251
<212> PRT
<213> A.fumigatus
```

<400> 43657  
 Gly Gln Gly Ser Arg Ile Ser Asp His Ser Gly Arg Trp Tyr His Gly  
 1 5 10 15  
 His Arg Pro Gly Glu Gly Lys Asn Leu Ile Lys Trp Thr Asp Arg Glu  
 20 25 30  
 Tyr Arg Leu His Arg Asn Thr Ser Tyr Asn Ala Leu Ala Lys Asn Gly



```
<210> 43658
<211> 87
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (81)
<223> Identity of amino acid sequences at the above locations are unknown.
```

```
<210> 43659
<211> 70
<212> PRT
<213> A.fumigatus
```

&lt;400&gt; 43659

```

Ile Ile Trp Ala Pro Leu Asp Tyr Leu Cys Ser Phe Pro Gly Lys Asp
1           5           10           15
Ile Arg Gly Lys Leu Ile Ser Ala Phe Asn Gln Trp Leu Gln Ile Pro
          20           25           30
Glu Asp Lys Leu Asp Val Ile Lys Arg Val Val Gly Leu Leu His Ser
          35           40           45
Ala Ser Leu Leu Tyr Ala Leu Pro Tyr Met Phe Ala Ser Gly Ile Gly
          50           55           60
Ser Leu Gln Ser Gln Asn
65           70

```

&lt;210&gt; 43660

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43660

```

Glu Val Tyr Asn His Arg Ile Asp Asp Ile Gln Asp Ser Ser Lys Leu
1           5           10           15
Arg Arg Gly Phe Pro Val Ala His Ser Ile Phe Gly Ile Ala Gln Thr
          20           25           30
Ile Asn Ser Ala Asn Phe Ala Tyr Phe Trp Ala Gln Gln Glu Leu Lys
          35           40           45
Ile Leu Gly Lys Pro Glu Ala Met Val Ile Phe Thr Glu Glu Met Leu
          50           55           60
Lys Leu His Pro Arg Pro Gly Ala Trp Ile Ser Thr Gly Glu Asn Pro
65           70           75           80

```

&lt;210&gt; 43661

&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (84), (204)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43661

```

Tyr Asp Leu Pro Gly Cys Ser Gly Ala Ile Arg Pro Val Pro Asn Trp
1           5           10           15
Met Cys Ala Ser Ser Lys Phe Pro Ser Met Ile Val Phe Arg Phe Phe
          20           25           30
Ser Gly Phe Phe Gly Ser Pro Thr Val Thr Asn Ser Gly Gly Ser Ile
          35           40           45
Thr Asp Ile Trp Pro Gln Asp Asn Arg Ser Val Pro Leu Ala Leu Phe
          50           55           60
Ser Ala Ala Ser Phe Leu Gly Pro Val Ile Ala Pro Thr Val Gly Gly
65           70           75           80
Phe Ile Cys Xaa Tyr Thr Ser Trp Arg Trp Asn Phe Trp Val Val Leu
          85           90           95
Ile Leu Ser Gly Val Cys Tyr Gly Ala Met Met Val Phe Leu Pro Glu
          100          105          110
Thr Tyr Ser His Lys Leu Leu Met Asp Lys Lys Arg Cys Met Pro Gly

```

[illegible]

```
<210> 43662
<211> 64
<212> PRT
<213> A.fumigatus
```

```
<210> 43663
<211> 84
<212> PRT
<213> A.fumigatus
```

```
<210> 43664
<211> 62
<212> PRT
<213> A.fumigatus
```

&lt;400&gt; 43664

```

Pro Ala Gln Ala Lys Val Leu Ala Ser Ala Asp Ser Pro Ser Ser Met
1           5           10           15
Arg Gln Ala Cys Phe Pro Ser Pro Asn Leu Pro Phe Met Val Val Tyr
          20           25           30
Tyr Asn Pro Glu Ser Leu Leu Phe Ile Ser Ile Glu Val Ile Asn Ala
          35           40           45
Cys Ser Ala Ala Leu Pro Ala Tyr Asp Tyr Phe Cys Leu Gln
          50           55           60

```

&lt;210&gt; 43665

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (26)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43665

```

Leu Gly Xaa Arg Thr Ile Ala Thr Ser His Ser Val Pro Arg Ala Arg
1           5           10           15
Ser Leu Ser Ser Pro Thr Trp Ser Ser Xaa Asp Val Leu Val Asp Ala
          20           25           30
Val Ser Ile Thr Ala Phe Thr Gly Ile Leu Arg Ser Met Asn Gly Arg
          35           40           45
Ser Met Ile Ile Arg His Val Cys Leu Ser Trp Arg
          50           55           60

```

&lt;210&gt; 43666

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6), (67), (73)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43666

```

Ser Pro Gly Gln Ala Xaa Ser Thr Pro Arg Gln Lys Phe Ile Gly Ala
1           5           10           15
Ser Ile Ala Leu Arg Ala Val Lys Leu Leu Tyr Gly Ala Trp Gln Asp
          20           25           30
Ala His Ser Pro Ile Thr Tyr Thr Asp Ile Glu Tyr Phe Val Ile Thr
          35           40           45
Asp Ala Ala Arg Tyr Val Ser Arg Gly Ala Ser Pro Asn Ala Arg Asp
          50           55           60
Met Tyr Xaa Tyr Thr Pro Leu Leu Xaa Trp Leu Leu Leu Pro Thr Thr
          65           70           75           80
Trp Asp Ser Ile Pro Gly Phe Leu Ala Phe Gly Lys Ala Gln Phe Ala
          85           90           95
Leu Ala Asp Val Val Ala Gly Trp Leu Ile Ala Lys Val Leu Val Ser
          100           105           110

```

## 19717

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Tyr | Gly | Met | Ser | Pro | Ser | Arg | Ala | Gln | Lys | Tyr | Ala | Ser | Val | Trp |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Leu | Asn | Pro | Met | Val | Ala | Asn | Ile | Ser | Thr | Arg | Gly | Ser | Ser | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Leu | Leu | Gly | Val | Leu | Val | Val | Gly | Met | Leu | Trp | Ala | Val | Leu | Ser |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Arg | Val | Ser | Leu | Ala | Gly | Ala | Ile | Leu | Gly | Leu | Gly | Val | His | Phe |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Lys | Ile | Tyr | Pro | Phe | Ile | Tyr | Gly | Pro | Ala | Val | Val | Trp | Trp | Phe | Asp |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ala | Glu | Arg | Asp | Gly | Ser | Gly | Ser | Pro | Arg | Gly | Thr | Ala | Thr | Ala | Arg |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ala | Ala | Arg | Glu | Lys | Asp | Asp | Gly | Gln | Asp | Gly | Gln | Gly | Ile | Leu | Ser |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Lys | Ala | Val | Asp | Phe | Leu | Thr | Pro | Ala | Arg | Ile | His | Leu | Thr | Leu | Val |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ala | Leu | Ala | Thr | Phe | Ser | Ala | Leu | Asn | Val | Ser | Met | Tyr | Ile | Leu | Tyr |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Asp | Leu | Pro | Phe | Ala | Gln | Asn | Thr | Tyr | Leu | Gln | Ser | Ser | Arg | Pro | Gly |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     |     | 270 |     |

&lt;210&gt; 43667

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (96), (101), (103)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43667

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ala | His | Phe | Leu | Leu | Cys | Ser | Asn | Pro | Gly | Gln | Ser | Asn | Asp | Lys |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Arg | Leu | Pro | Lys | Pro | Gly | Pro | Tyr | Arg | Phe | Pro | Asn | Thr | Ala | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Met | Ala | Gly | Gly | Ala | Ala | Lys | Tyr | Arg | His | Leu | Ser | Arg | Lys | Ser |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ser | His | Arg | Gln | Ala | Leu | Leu | Arg | Asn | Leu | Val | Thr | Ser | Leu | Phe | Lys |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| His | Glu | Ser | Ile | Thr | Thr | Thr | Cys | Ala | Lys | Ala | Lys | Glu | Ala | Gln | Arg |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Ala | Glu | Lys | Leu | Ile | Thr | Leu | Cys | Lys | Lys | Asn | Thr | Asp | Ala | Xaa |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Leu | Ile | Arg | Ala | Xaa | Ser | Xaa | Phe | Tyr | Val | Cys | Ala | Pro | Thr | Asp | Ser |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     |     | 110 |     |

&lt;210&gt; 43668

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (64)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

19718

<400> 43668

```

Thr Pro Leu Ile Leu Arg Arg Leu Ile Gln His Cys Gly Arg Phe Tyr
1           5           10           15
Asn Gln Thr Ser Phe Ser Gly Leu Glu Thr His Ile Ala Asn Ser Phe
          20           25           30
Thr Asn Ala Leu Leu Gln Leu Leu Lys Phe Ile Leu Leu Val Arg Asn
          35           40           45
Leu Ser Ser His Thr Ala Thr Ala Gly Tyr Lys Leu Thr Leu Arg Xaa
          50           55           60

```

<210> 43669

<211> 213

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (107)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43669

```

Gly Ile Leu Lys Gly Ile Asn Leu Gly Ser Ser Gln Ser Ile Leu Ser
1           5           10           15
Trp Trp Gly Met Asp Ile Ser Pro Ser Arg Arg Ser Ser Gly Leu Leu
          20           25           30
Arg Met Arg Ser Val Pro Ser His Leu Trp Gly Ser Arg Phe Lys Ile
          35           40           45
His Phe Asn Glu Met Ser Lys Glu Phe Glu Leu Ala Asp Val Val Leu
          50           55           60
Arg Pro Leu Pro Leu Glu Cys Ser Pro Asp Thr Pro Leu Asn Met Ile
          65           70           75           80
Gly Met Pro Tyr Tyr Arg Glu Arg Leu Leu Ser Ala Ser Leu Ser His
          85           90           95
Leu Val Phe Glu Val Gly Ser Pro Pro Ala Xaa Ile Asp Gln Ser Leu
          100          105          110
Ile Pro Tyr Leu Arg Pro Ala Glu Met Gly His Tyr Ala Pro Asn Pro
          115          120          125
Lys Lys Thr Arg Arg Tyr Gln Val Glu Asn Thr Arg Ala Leu Thr Thr
          130          135          140
Ala Glu Pro Ala Leu Ile Ala Pro Lys Phe Leu Ser Glu Lys Ala Arg
          145          150          155          160
Glu Gln Ser Lys Phe Lys Ser Glu Ala Ser Val Ser Asp Thr Ala Glu
          165          170          175
Ala Leu Ala Gly Ala Lys Leu Asn Gly Glu Ala Glu Asp Asp Pro Leu
          180          185          190
Leu Lys Tyr Ser Asn Val Glu Ile Lys Tyr Ser Arg Phe Gly Val Asp
          195          200          205
Asp Phe Asp Phe Arg
          210

```

<210> 43670

<211> 76

<212> PRT

<213> A.fumigatus

19719

<400> 43670

```

Lys Lys Arg Thr Val Ser Ile Asn Met Ala Thr Lys Thr Pro Val Leu
1          5          10          15
Thr Glu Lys Ala Pro Lys Pro Leu Pro Gly Ile Tyr Ser Gln Ala Ile
          20          25          30
Ile Ala Asn Gly Val Val Tyr Cys Ser Gly Ala Val Ala Met Asp Pro
          35          40          45
Glu Thr Gly Lys Leu Ile Asp Gly Asp Val Lys Ala His Thr Val Leu
          50          55          60
Pro Ser Ile Tyr Thr Phe Val Val Ser Leu Val Glu
65          70          75

```

<210> 43671

<211> 65

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (63)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43671

```

Leu Lys Lys Met Lys Glu Ser Leu Thr His Val Cys Ser Leu Ala Thr
1          5          10          15
Ser Arg Ser Cys Asp Ala Thr Phe Ile Asn Gln Pro Lys Ser Thr Asn
          20          25          30
Ala Ile Val Ala Ile Cys Pro Tyr Ala Leu Lys Leu Ser Val Ser Arg
          35          40          45
Asn Leu Val Phe Thr Thr Gly Leu Arg Arg Asp Arg Thr Thr Xaa Asp
          50          55          60
Ala
65

```

<210> 43672

<211> 186

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (58)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43672

```

Ala Arg Ile Leu Pro Ala Pro Arg Gly Glu Asp Ala Arg Ala Leu Gly
1          5          10          15
Gly Leu Leu Asn Gly Asn Ile Gly Val Leu Gln Thr Thr Val Ala Glu
          20          25          30
Ile Val Thr Val Lys Glu His Gln Pro Arg Ala Tyr Ser Ile Met Pro
          35          40          45
Phe Val Trp Cys Leu Gly Ser Ile Ile Xaa Pro Ala Met Gly Gly Ala
          50          55          60
Leu Ala Gln Pro Cys Gln Asn Tyr Pro Gly Leu Phe Gln Arg His Thr
65          70          75          80
Ile Phe Asp Ser Phe Pro Phe Leu Leu Pro Asn Leu Val Cys Val Val

```

| Variable               | Mean | Standard deviation | Minimum | Maximum | Skewness | Kurtosis | Normality test |
|------------------------|------|--------------------|---------|---------|----------|----------|----------------|
| Age                    | 35.2 | 12.5               | 20      | 65      | 0.15     | 3.2      | 0.98           |
| Gender                 | 0.52 | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Education              | 12.8 | 2.1                | 9       | 16      | -0.10    | 3.1      | 0.97           |
| Income                 | 15.5 | 8.2                | 5       | 35      | 0.25     | 3.3      | 0.96           |
| Health                 | 0.85 | 0.35               | 0       | 1       | -0.15    | 3.0      | 0.99           |
| Marital status         | 0.68 | 0.47               | 0       | 1       | -0.05    | 3.0      | 0.99           |
| Religion               | 0.45 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Occupation             | 0.32 | 0.46               | 0       | 1       | -0.08    | 3.1      | 0.98           |
| Political party        | 0.28 | 0.45               | 0       | 1       | -0.03    | 3.0      | 0.99           |
| Volunteering           | 0.15 | 0.36               | 0       | 1       | -0.12    | 3.1      | 0.97           |
| Charitable giving      | 0.08 | 0.27               | 0       | 1       | -0.18    | 3.2      | 0.96           |
| Prosocial behavior     | 0.22 | 0.41               | 0       | 1       | -0.06    | 3.0      | 0.99           |
| Life satisfaction      | 0.75 | 0.42               | 0       | 1       | -0.10    | 3.1      | 0.97           |
| Trust in others        | 0.62 | 0.48               | 0       | 1       | -0.04    | 3.0      | 0.99           |
| Community involvement  | 0.38 | 0.49               | 0       | 1       | -0.09    | 3.1      | 0.98           |
| Helping others         | 0.25 | 0.43               | 0       | 1       | -0.07    | 3.0      | 0.99           |
| Cooperativeness        | 0.35 | 0.47               | 0       | 1       | -0.05    | 3.0      | 0.99           |
| Generosity             | 0.20 | 0.40               | 0       | 1       | -0.11    | 3.2      | 0.96           |
| Altruism               | 0.18 | 0.38               | 0       | 1       | -0.13    | 3.3      | 0.95           |
| Empathy                | 0.40 | 0.49               | 0       | 1       | -0.06    | 3.0      | 0.99           |
| Compassion             | 0.30 | 0.46               | 0       | 1       | -0.08    | 3.1      | 0.98           |
| Kindness               | 0.28 | 0.45               | 0       | 1       | -0.07    | 3.0      | 0.99           |
| Forgiveness            | 0.35 | 0.47               | 0       | 1       | -0.05    | 3.0      | 0.99           |
| Patience               | 0.32 | 0.46               | 0       | 1       | -0.06    | 3.1      | 0.98           |
| Self-control           | 0.45 | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Emotional stability    | 0.55 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Conscientiousness      | 0.60 | 0.49               | 0       | 1       | -0.03    | 3.0      | 0.99           |
| Openness to experience | 0.50 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Agreeableness          | 0.58 | 0.49               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Neuroticism            | 0.40 | 0.49               | 0       | 1       | -0.04    | 3.0      | 0.99           |
| Extraversion           | 0.52 | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Conscientiousness      | 0.55 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Openness to experience | 0.50 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Agreeableness          | 0.58 | 0.49               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Neuroticism            | 0.40 | 0.49               | 0       | 1       | -0.04    | 3.0      | 0.99           |
| Extraversion           | 0.52 | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Conscientiousness      | 0.55 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Openness to experience | 0.50 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Agreeableness          | 0.58 | 0.49               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Neuroticism            | 0.40 | 0.49               | 0       | 1       | -0.04    | 3.0      | 0.99           |
| Extraversion           | 0.52 | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Conscientiousness      | 0.55 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Openness to experience | 0.50 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Agreeableness          | 0.58 | 0.49               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Neuroticism            | 0.40 | 0.49               | 0       | 1       | -0.04    | 3.0      | 0.99           |
| Extraversion           | 0.52 | 0.50               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Conscientiousness      | 0.55 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Openness to experience | 0.50 | 0.50               | 0       | 1       | -0.01    | 3.0      | 0.99           |
| Agreeableness          | 0.58 | 0.49               | 0       | 1       | -0.02    | 3.0      | 0.99           |
| Neuroticism            | 0.40 | 0.49               | 0       | 1       | -0.04    | 3.0      | 0.99           |
| Extraversion           | 0.52 | 0.50               | 0       | 1       | -0.02    |          |                |

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<210> 43673
<211> 197
<212> PRT
<213> A.fumigatus
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```
<210> 43674
<211> 76
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32), (35), (36)
<223> Identity of amino acid sequences at the above locations are unknown.
```



19721

<400> 43674

```

Thr Lys Trp Asn Trp Lys Met Ile Leu Pro Lys Val Ala Glu Pro Thr
1           5           10           15
Asn Phe Leu Val Tyr Phe Gln Gly Asn Gly Ala Leu Pro Phe His Xaa
          20           25           30
Ile Phe Xaa Xaa Phe Ser Pro Tyr Phe Phe Phe Pro Thr Val Leu Glu
          35           40           45
Arg Leu Ser Val Pro Ser Gln Ser Leu His Ser Gly Ala Gln Ser Ile
          50           55           60
Tyr Leu Phe Ala Leu Phe Arg Glu Leu Gly Pro Ala
65           70           75

```

<210> 43675

<211> 151

<212> PRT

<213> A.fumigatus

<400> 43675

```

Thr Pro Arg Arg Arg Tyr Val Pro Phe Phe Ser Asn Ser Pro Tyr Leu
1           5           10           15
Thr Cys Ser Leu Gly Gly Gln Ser Val Gln Asp Gly Ser Pro Ser Gly
          20           25           30
His Phe Leu Ser Arg Gly Arg Gln Ala Ser Arg Tyr Gly Lys Gly Glu
          35           40           45
Asp Val Asn Ala Val Phe Leu Lys Arg Leu Asp His Ala Leu Arg Asp
          50           55           60
Gly Asp Pro Ile Arg Ala Ile Ile Arg Gly Trp Ala Ser Asn Asn Asp
65           70           75           80
Gly Thr Arg Ser Pro Pro Met Cys Pro Gly Pro Asp Ser Gln Ala Ala
          85           90           95
Cys Ile Arg Ser Ala Tyr Ala Met Ala Asn Leu Gln Asp Phe Glu Thr
          100          105          110
Thr Ala Tyr Ile Gln Cys His Gly Met Glu Ser Thr Val Arg Ile Pro
          115          120          125
Phe Asp Pro Ala Val Val Phe Tyr His Phe His Gln Leu Asn Val Tyr
          130          135          140
Gln Val Gly Gln Pro Leu Asp
145           150

```

<210> 43676

<211> 100

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (3)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43676

```

Gln His Xaa Asn Gly Pro Gln Gly Lys Thr Ile Glu Gly Lys Leu Ser
1           5           10           15
Ser Val Pro Lys Phe Ser Cys Gly Gln Asp Lys Lys Gly Phe Ser Ile
          20           25           30
Ser Lys Leu His Leu Ser Thr Ser Lys Glu Thr Glu Val His Ile Val

```

## 19722

35 40 45  
 Tyr Gly Met Pro Asp Gly Ser Thr Cys Arg Asn Ile Ala Ser Cys Ser  
 50 55 60  
 Pro Asp Gly Thr Gln Val Thr Asn Asp Gln Cys Gly Gly Ala Thr Ser  
 65 70 75 80  
 Val Ser Phe Glu Pro Pro Glu Gly Ser Glu Val Leu Thr Arg Arg Trp  
 85 90 95  
 Lys Asp Asn Ala  
 100

&lt;210&gt; 43677

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (69)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43677

Tyr Ser Asn Pro Glu Asn Thr Asp Asn Glu Cys Thr Asp His Gln Lys  
 1 5 10 15  
 Gly Gly Trp Asp Trp Ser Asp Leu Ser Ser Gly Ser Phe Ser Ser Tyr  
 20 25 30  
 Gly Gly Phe Asp Phe Ser Gly Phe Lys Cys Ser Asp Ser Thr Gly Trp  
 35 40 45  
 Gly Lys Arg Thr Phe Val Ser Arg Leu Asn Leu Leu Leu Pro His His  
 50 55 60  
 Asn Ser Asn Met Xaa Met Ala His Arg Ala Lys Pro Leu Arg Gly Ser  
 65 70 75 80  
 Ser His Leu Ser Pro Ser Ser Pro Ala Ala Lys Thr Lys Arg Gly Ser  
 85 90 95  
 Pro Leu Ala Ser Cys Thr Ser Pro Pro Arg Arg Pro Arg Cys Thr  
 100 105 110  
 Ser Ser Met Ala Cys Pro Met Val Pro Pro Ala Val Thr Leu Leu Leu  
 115 120 125  
 Ala Arg Pro Thr Val Pro Arg Ser Pro Met Thr Ser Val Val Val Pro  
 130 135 140  
 Pro Pro  
 145

&lt;210&gt; 43678

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43678

Thr Met Arg Gly Ser Glu Ala Ser Gly Pro Gly Ala Ile Phe Gly Ala  
 1 5 10 15  
 Pro Ser Thr Leu Thr Thr Ser Val Ile Arg Asn Pro Thr Ser Phe Leu  
 20 25 30  
 Ser Ser Ser Thr Pro Leu Pro Ser Thr Asp Ala Asp Val Ile Ala Gln  
 35 40 45  
 Asn Val Glu His Val Leu Leu Ser Leu Thr Ser His Asn Asp Gly Gly  
 50 55 60

# 19723

Leu Val Gly Val Gln Trp Gln Leu Ser Leu Thr Thr Gly Gly Asp Pro  
 65 70 75 80  
 Arg

<210> 43679  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 43679  
 Leu Pro Glu Ser Ala Ile Met Ala Ser Asn Ser Tyr Lys Ala Leu Arg  
 1 5 10 15  
 Ser Gln Tyr Gln Ala Ala Leu Lys Arg Phe Ile Asn Ser Ser Lys Asn  
 20 25 30  
 Leu Asp Ile Leu Asn Ser Val Pro Leu Asn His Gln Gln Tyr Gln Lys  
 35 40 45  
 Gln Ala Ser Gln Ala Pro Tyr Ile Leu Tyr Val Leu Asp Ser Ser Cys  
 50 55 60  
 Asn Pro Pro Thr Leu Ala His Leu Arg Ile Ala Ile Ser Thr Leu Ser  
 65 70 75 80  
 Gly Lys Thr Gln Cys Ser Leu Pro Ala Ala Ala Thr Pro Pro  
 85 90

<210> 43680  
 <211> 134  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (17)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43680  
 Phe Met Ser Met Val Asp Ile Phe Asp Tyr Leu Pro Arg Ser His Pro  
 1 5 10 15  
 Xaa Tyr Glu Lys Asn Leu Arg Arg Phe Gln Ser Leu Ala Lys Ala Phe  
 20 25 30  
 Lys Lys Thr Gln Asp Lys Ser Gly Gly Trp Trp Leu Ile Met Asp Gly  
 35 40 45  
 Glu Tyr Pro Arg Asp Pro Arg Lys Tyr Ile Glu Ser Ser Gly Thr Ala  
 50 55 60  
 Met Phe Ala Tyr Gly Leu Leu Lys Gly Val Arg Lys Gly Tyr Ile Arg  
 65 70 75 80  
 Ser Lys Asp Tyr Leu Ala Pro Ala Thr Lys Ala Tyr Asn Leu Met Val  
 85 90 95  
 Asp Lys Phe Val Glu Thr Asn Ala Asp Gly Thr Leu Asn Trp Leu Gly  
 100 105 110  
 Thr Val Gln Val Gly Ser Leu Ser Asn Gly Thr Phe Glu Val Ser  
 115 120 125  
 Met Asn Leu Tyr Leu Thr  
 130

<210> 43681  
 <211> 212

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (138), (160)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43681

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Leu | Leu | Gly | Gly | Gly | Ala | Trp | Leu | Gly | Gly | Gln | Leu | Phe | Ser | Ala |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Met | Val | Leu | Arg | Arg | Pro | Ala | Glu | Val | Phe | Leu | Asn | Glu | Ile | Gly | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Phe | Glu | Glu | Asp | Pro | Ala | Asn | Pro | Asn | Phe | Val | Val | Val | Lys | His |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Ser | Leu | Phe | Thr | Ser | Thr | Leu | Met | Ser | Lys | Val | Leu | Ser | Phe | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Val | Lys | Leu | Phe | Asn | Ala | Thr | Ala | Val | Glu | Asp | Leu | Val | Thr | Arg |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Pro | Ser | Ala | Ser | Gly | Asp | Ala | Lys | Asp | Thr | Gln | Ile | Ala | Gly | Val | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Asn | Trp | Thr | Leu | Val | Thr | Leu | His | His | Asp | Asp | His | Ser | Cys | Met |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Pro | Asn | Thr | Ile | Asn | Ala | Pro | Val | Val | Ile | Ser | Thr | Thr | Gly | His |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Gly | Pro | Phe | Gly | Ala | Phe | Cys | Ala | Xaa | Arg | Leu | Val | Ser | Met | Asn |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Thr | Val | Asp | Lys | Leu | Gly | Gly | Met | Arg | Gly | Leu | Asp | Met | Asn | Ser | Xaa |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Glu | Asp | Ala | Ile | Val | Lys | Asn | Thr | Arg | Glu | Val | Ala | Lys | Gly | Leu | Ile |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ile | Gly | Gly | Met | Glu | Leu | Ser | Glu | Ile | Asp | Gly | Leu | Asn | Val | Trp | Gly |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Pro | Thr | Leu | Ala | Pro | Trp | Gly | Leu | Thr | Val | Val | Lys | Leu | Pro | Lys | Ser |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Leu | Arg | Ser |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 210 |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43682

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43682

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Xaa | Lys | Thr | Phe | Ala |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Ile | Arg | Glu | Ser | Gln | Val | Ser | Arg | Ala | Met | Thr | Arg | Arg | Tyr | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Asp | Leu | Asp | Lys | Tyr | Ala | Glu | Ser | Asp | Ile | Val | Ile | Val | Gly | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Ser | Cys | Gly | Leu | Ser | Thr | Ala | Tyr | Val | Leu | Ala | Lys | Ala | Arg | Pro |

## 19725

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |     |
| Asp | Leu | Lys | Ile | Ala | Ile |
| 65  |     | 70  |     | 75  |     |
| Ser | Leu | His | Lys | Pro | Ser |
|     |     | 85  |     | 90  |     |
| Cys | Leu | Ala | Arg | Arg | Pro |
|     |     | 100 |     | 105 |     |
| Cys | Arg | Gly | Phe | Pro | Gln |
|     |     | 115 |     | 120 |     |
| Cys | Lys | Pro | Gln | Leu | Arg |
|     |     | 130 |     | 135 |     |
| Tyr | Leu | Asp | Val | Gln | Gly |
| 145 |     | 150 |     | 155 |     |
| Arg | His | Cys | Arg | Arg | Gly |
|     |     | 165 |     | 170 |     |

&lt;210&gt; 43683

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2),(6),(8),(9),(10),(20),(27)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43683

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Xaa | Lys | Phe | Gln | Xaa | Arg | Xaa | Xaa | Xaa | Lys | Asn | Arg | Ala | Ile | Val |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Glu | Glu | Ile | Xaa | Lys | Leu | Ala | Ala | Arg | Glu | Xaa | Cys | Thr | Thr | Ser | Gln |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Ile | Ala | Leu | Ala | Trp | Phe | Pro | Ala | Gln | Gly | Phe | Ile | Ala | Ile | Pro | Gly |
|     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |     |
| Thr | Thr | Lys | Ala | Lys | Arg | Leu | Glu | Glu | Asn | Trp | Ala | Ser | Arg | Glu | Ile |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Glu | Leu | Thr | Glu | Glu | Glu | Lys | Gln | Glu | Met | Arg | Arg | Ile | Ile | Asp | Val |
| 65  |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |     |
| Ala | Lys | Pro | His | Gly | Asn | Arg | Tyr | Gly | Pro | Glu | Asn | Gln | Ala | Leu | Val |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |

Gly His

&lt;210&gt; 43684

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43684

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Ser | Ala | Ala | Tyr | Leu | Ala | Leu | Phe | Phe | Phe | Asn | Gly | Tyr | Asn |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Tyr | Tyr | Val | Leu | Pro | Ala | Glu | Tyr | Ser | Asp | Arg | Asp | Ser | Val | Leu | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Trp | Asn | Phe | Arg | Ala | Gly | Leu | Phe | Leu | Ala | Phe | Ile | Tyr | Pro | Gly | Ala |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Thr | Ala | Ala | Arg | Gln | Met | Val | Ser | Asn | Lys | Pro | Arg | Ser | Thr | Gly | Asp |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |

His Pro Lys Arg Asn  
65

<210> 43685

<211> 109

<212> PRT

<213> A.fumigatus

<400> 43685

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Thr | Ile | Gly | Arg | Ser | Met | Asp | Ser | Ile | Leu | Val | Val | Ser | Ser | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Glu | Ala | Ser | Ala | Pro | Ser | Leu | Ala | Pro | Ser | Cys | Val | Leu | Cys | Leu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Leu | Phe | Glu | Arg | Phe | Pro | Ile | Pro | Leu | Pro | Pro | Ser | Pro | Lys | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Gly | Val | Asp | Phe | Ala | His | Thr | Lys | Leu | Pro | His | Pro | Leu | Thr | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Ala | Thr | His | Gln | Ser | Tyr | Gly | Pro | Cys | Phe | Thr | Leu | Ser | Leu | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Tyr | Thr | Phe | Asn | Ser | Arg | Phe | Leu | Asp | Ala | Asp | Phe | Arg | Arg | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Glu | Glu | Thr | Ala | Asp | Lys | Gly | Phe | Ala | Tyr | Pro | Leu |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

<210> 43686

<211> 123

<212> PRT

<213> A.fumigatus

<400> 43686

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Cys | Thr | Gly | Asp | Leu | Val | Gly | Leu | Gly | Thr | Asn | Gly | Met | Asp | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Cys | Arg | Trp | Asp | Lys | Ser | Met | Arg | Pro | Ala | Ile | Asp | Ser | Ile | Arg |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Ala | Ile | Ser | Ser | Phe | Asp | Tyr | Tyr | Asp | Ser | Asn | Gly | Glu | Leu | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Cys | Leu | Pro | Tyr | Ala | Pro | Gly | Asp | Leu | Leu | Asn | Val | Glu | Val | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Met | Ser | Gly | Leu | Ile | Asp | Leu | Leu | Tyr | Gly | Lys | Ala | Lys | Asp | Cys |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly | Ile | Asp | Leu | Arg | Phe | Gly | Ala | Ile | Val | Cys | Asp | Tyr | Trp | Glu | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Gly | Asn | Ala | Gly | Ile | Val | Leu | Glu | Asn | Gly | His | Lys | Val | Ala | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Cys | Val | Ile | Ala | Ala | Asp | Gly | Trp | Gly | Thr |     |     |     |     |     |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     |     |     |     |     |

<210> 43687

<211> 112

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (108)

<223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43687

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Leu Leu Leu Met Asp Gly Val His Ser Lys Ala Thr Gly Thr Ile Thr
1          5          10          15
Gly Lys Asp Val Ala Pro Tyr Ser Thr Gly Ala Ala Ile Tyr Arg Ser
          20          25          30
His Phe Asp Ala Arg Glu Ile Arg Asp Asp Pro Glu Ala Asn Trp Ile
          35          40          45
Leu Asp Ser Thr Gly Arg Ala Asp His Ala Asn Met Tyr Leu Gly Lys
          50          55          60
Asp Thr Ile Leu Leu Val Gly Thr Val Gly Lys Gly Lys Asn Val Ser
65          70          75          80
Trp Asp Met Pro His Lys Val Ser Ser Ser Leu Ala Phe Pro Phe Leu
          85          90          95
Glu Gly Ser Tyr Thr Thr Ala Arg Trp Lys Val Xaa His Leu Ala Tyr
          100          105          110

```

&lt;210&gt; 43688

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43688

```

Tyr Val Leu Phe Phe Pro Ser Leu Phe Gly Gly Pro Ser Phe Glu Tyr
1          5          10          15
Val Asp Tyr Arg Arg Trp Leu Asp Thr Thr Leu Phe Glu Val Pro Pro
          20          25          30
Gly Thr Asp Pro Ser Lys Val Pro Pro Thr Arg Lys Lys Arg Lys Ile
          35          40          45
Pro Arg Ser Gly Thr Pro Ala Thr Lys Lys Ala Leu Met Gly Leu Val
          50          55          60
Trp Ile Phe Val Phe Leu Gln Leu Gly Ser Leu Tyr Asn Lys Glu Ser
65          70          75          80
Val Leu Gly Glu Ser Phe Leu Ser Tyr Ser Phe Leu Arg Arg Val Trp
          85          90          95
Ile Leu Tyr Met Leu Gly Phe Thr Thr Arg Thr Lys Tyr Tyr Gly Val
          100          105          110
Trp Ser Leu Thr Glu Gly Ala Cys Ile Leu Ser Gly Leu Gly Tyr Asn
          115          120          125
Gly Phe Asp Pro Lys Thr Gly Lys Val Phe Trp Asn Arg Leu Glu Asn
          130          135          140
Ile Asp Pro Trp Ser Leu Glu Thr Ala Gln Lys Ser Ser Pro Arg Val
145          150          155          160
Ala Asn Pro Arg Ile Ser His
          165

```

&lt;210&gt; 43689

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43689

```

Arg Arg Arg Ile Phe Gln Pro Arg Gly Glu Glu Ser Ser Pro Ser Pro
1          5          10          15
Asp Gln Ser Pro Pro Pro Arg Pro Thr Lys Pro Ser Pro Pro Thr Thr
          20          25          30

```

## 19728

Ala Thr Thr Gln Gln Pro Gly Gln Leu Pro Ser Leu Leu Leu Ser Pro  
           35                          40                          45  
 Arg Pro Pro Tyr Gln Gln Asn His Pro Pro Pro Pro Pro Pro Leu Arg  
       50                          55                          60  
 Pro His Pro Gln Pro Thr Thr Ala Pro Pro Val Ser Ser Leu Gln His  
 65                          70                          75                          80  
 Pro Pro Thr Lys Leu Gln Ala Thr Ser Pro Lys Pro Ala Ser Pro Thr  
                           85                          90                          95  
 Pro Leu Ser Arg Arg Thr Arg Pro Leu Lys Lys Lys Ser Thr Gly Arg  
                           100                          105                          110  
 Ala Pro Ser Thr Gly Ser Pro Pro Arg His Ser Pro Arg Lys Tyr Pro  
                           115                          120                          125  
 Ile Ser Ser Ser Arg Lys Ser Thr Pro Asn Lys Ser Arg Ser Ser Pro  
       130                          135                          140  
 Met Ala Ser Cys Thr Ser Pro Arg Ser Ser Thr Gly Gly Ser  
 145                          150                          155

&lt;210&gt; 43690

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (6), (54), (60), (76)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43690

Trp Val Tyr Arg Leu Xaa Ser Val Ala Arg Gly Glu Gln Asp Tyr Phe  
   1                          5                          10                          15  
 Thr Pro Asp Gly Ile Pro Thr Ala Thr Glu Gly Cys Arg Ser Asn Ala  
                           20                          25                          30  
 Leu Val Arg Cys Cys Lys Asp Leu Gly Asp Cys Lys Arg Thr Val Gly  
                           35                          40                          45  
 Asn Arg Gly Trp Asn Xaa Ala Val Pro Arg Arg Xaa Asn Thr Pro Ala  
                           50                          55                          60  
 Arg Cys Leu Phe Asn Asn Val Val Glu Gln Lys Xaa Gly Thr Arg Ile  
 65                          70                          75                          80  
 Trp Val Thr Gln Gly Arg Ile Arg Phe Leu Ile Arg Trp Lys Glu Ile  
                           85                          90                          95  
 Gly Asn Lys Leu Leu Glu Pro Met Phe Pro Gly Gly  
                           100                          105

&lt;210&gt; 43691

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43691

Arg Ile Leu Ser Leu Thr Arg Ser Ile Thr Thr Thr Ser Ser Tyr Lys  
   1                          5                          10                          15  
 Ala Ile Thr Thr Asn Asn Ser Asn Asn Pro Ala Thr Arg Thr Ala Pro  
                           20                          25                          30  
 Lys Pro Pro Ile Val Ser Thr Pro Thr Leu Pro Ala Lys Pro Ser Thr  
                           35                          40                          45  
 Ala Ser Thr Ser Thr Ala Pro Ala Pro Thr Thr Asp Asp Arg Ala Ala



## 19729

|                         |                     |                     |     |    |
|-------------------------|---------------------|---------------------|-----|----|
| 50                      |                     | 55                  |     | 60 |
| Arg Ile Leu Ala Pro Thr | Pro Thr His Gln Thr | Thr Ser Asn Ile Ser |     |    |
| 65                      | 70                  | 75                  | 80  |    |
| Lys Thr Gly Leu Ala Asp | Ala Pro Leu Ser Pro | Asp Ser Pro Pro Glu |     |    |
|                         | 85                  | 90                  | 95  |    |
| Glu Lys Ile Asp Trp Thr | Arg Ser Phe His Gly | Leu Ser Ala Ala Pro |     |    |
|                         | 100                 | 105                 | 110 |    |
| Phe Pro Lys Glu Val Ser | Asp Ile Leu Leu Ala | Glu Val Asp Pro Glu |     |    |
|                         | 115                 | 120                 | 125 |    |

&lt;210&gt; 43692

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (75), (83)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43692

|                 |                         |                             |
|-----------------|-------------------------|-----------------------------|
| Val Glu Ile Lys | Pro Asp Gly Ile Leu Tyr | Leu Pro Glu Ile Lys Tyr     |
| 1               | 5                       | 10                          |
| Arg Arg Ile Leu | Asn Arg Ala Phe Gly     | Pro Arg Gly Trp Gly Leu Val |
|                 | 20                      | 25                          |
| Pro Arg Ser Glu | Ser Ile Val Thr Pro     | Arg Thr Val Asn Lys Glu Tyr |
|                 | 35                      | 40                          |
| Ala Leu Val Cys | Asn Gly Arg Tyr Val Phe | Phe Ala Ser Leu Leu Leu     |
|                 | 50                      | 55                          |
| Trp Asp Gly Arg | Val Trp Gly Asp Thr Asn | Xaa Gly Leu Met Gly Val     |
|                 | 65                      | 70                          |
| Gln Val Xaa Val | Cys Arg Ala Gly Arg Ala | Gly Leu Leu His Ala Gly     |
|                 | 85                      | 90                          |
| Trp Asp Pro Asp | Ser Asn Gly Arg Val Ser | Val                         |
|                 | 100                     | 105                         |

&lt;210&gt; 43693

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43693

|                 |                     |                             |
|-----------------|---------------------|-----------------------------|
| Pro Xaa Ile Cys | Ile Ser Pro Tyr Ser | Pro Val Pro Lys Gln Lys Arg |
| 1               | 5                   | 10                          |
| Ser Lys Lys Tyr | Ile Pro Pro Ile Thr | Asn Gln Ser Ile Leu Leu Val |
|                 | 20                  | 25                          |
| His Arg Thr Arg | Arg Asn Asn Thr Leu | Ala Pro Arg His Glu Ala Pro |
|                 | 35                  | 40                          |
| Thr Pro Trp Pro | Lys Arg Pro Val Gln | Asp Pro Pro Val Leu Asp Leu |
|                 | 50                  | 55                          |
| Gly Glu Val Gln | Asp Ala Ile Gly Leu | Asp Leu Asp Leu Phe Gly Val |

# 19730

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Asp | Phe | Arg | Glu | Glu | Asp | Ile | Gly | Tyr | Phe | Leu | Gly | Glu | Trp | Arg | Gly |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Glu | Pro | Val | Glu | Gly | Ala | Arg | Pro | Val | Asp | Phe | Phe | Phe | Arg | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Val | Arg | Arg | Glu | Arg | Gly | Val | Gly | Glu | Ala | Gly | Phe | Gly | Asp | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Cys | Ser | Leu | Val | Gly | Gly | Cys | Trp | Ser | Glu | Asp | Thr | Gly | Gly | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val | Val | Gly | Cys | Gly | Cys | Gly | Arg | Ser | Gly | Gly | Gly | Gly | Gly | Gly | Trp |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |
| Phe | Cys | Trp |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43694

<211> 174

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (171)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43694

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Met | Ala | Trp | Gln | Glu | Ile | Arg | Arg | Trp | Arg | Ser | Met | Lys | Glu | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Gln | Leu | Val | Arg | Lys | Glu | Ala | His | Asp | Pro | Met | Asp | Val | Val | Tyr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Ile | Val | Ser | Arg | Pro | Tyr | Thr | Ala | Ala | Ala | Gly | Ile | Lys | Ala | Ala | Ser |
|     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Arg | Phe | Ser | His | Ser | Arg | Arg | Gln | Ile | Leu | Val | Arg | Trp | Ala | Ile | Ala |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Tyr | Ala | Thr | Thr | Pro | Ala | Ala | Leu | Leu | Val | Leu | Cys | Leu | Gly | Val | Ala |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Gly | Leu | Leu | Ser | Cys | Leu | Cys | Gln | Tyr | Leu | Ile | Leu | Gln | Ala | Val | Glu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Lys | Thr | Val | Pro | Glu | Leu | Ser | Thr | Gln | Val | Gly | Ala | Phe | Ala | Asp | Lys |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Val | Asp | Ser | Val | Gln | Asn | Ala | Ser | Ala | Glu | Trp | Ala | Asn | Asp | Ala |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Asn | Gly | Val | Ile | Gly | His | Met | Asn | Gln | Asp | Leu | Asn | Glu | Asn | Val | Phe |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Trp | Val | Asn | Thr | Ser | Thr | Thr | Ala | Leu | Asn | Asp | Thr | Val | His | Thr |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Phe | Val | Val | Leu | Glu | Gln | Ala | Ala | Gly | Lys | Xaa | Thr | Val | Arg |     |     |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     |     |     |

<210> 43695

<211> 264

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (230), (240), (250), (256), (261)

## 19731

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43695

```

Ile Phe Gly Gly Gly His Ile Ser Ser Ser Arg Arg Leu Met Thr Ala
1           5           10           15
Gln Trp Val Trp Asp Cys Ile Asn Glu Gly Arg Leu Val Arg Pro Asp
          20           25           30
Leu Tyr Ala Pro Gly Ala Thr Leu Pro Pro His Leu Ser Pro Trp Val
          35           40           45
Lys Pro Ser Arg Gly Gly Tyr Asp Pro Lys Ala Ser Leu Ala Glu Gln
          50           55           60
Glu Glu Glu Gly Glu Ala Glu Leu Asp Glu Asp Ser Asp Glu Glu Met
65           70           75           80
Glu Glu Ala Thr Ser Asp Lys Lys Ala Glu Gly Lys Ala Asp Val Gly
          85           90           95
Ser Glu Ser Glu Asp Glu Asp Glu Ser Val Asp Gly Gly Met Asp Val
          100          105          110
Ala Gly Thr Asp Asp Asp Glu Ser Glu Ser Glu Asp Glu Glu Glu Asp
          115          120          125
Phe Asp Gly Phe Glu Glu Glu Ala Ala Ser Glu Ser Glu Asp Glu Glu
          130          135          140
Glu Ala Ala Arg Thr Gln His Gln Lys Glu Leu Glu Ala Glu Thr Ala
145          150          155          160
Gly Leu Pro Phe Ser Ser Asn Gly Ala Thr Ile Asp Gly Ser Lys Lys
          165          170          175
Lys Ala Ser Gln Ala Lys Lys Ile Ala Ala Lys Lys Arg Lys Glu Glu
          180          185          190
Glu Glu Leu Glu Arg Gln Lys Met Met Met Ser Arg Lys Lys Arg Lys
          195          200          205
Leu Leu Glu Lys Met Ile Tyr Ser Asn Lys Lys Gln Ser Glu Glu Ala
          210          215          220
Ala Lys Leu Arg Ser Xaa Arg Arg Lys Leu Glu Asn Gly Gly Gly Xaa
225          230          235          240
Met Ser Ser Tyr Arg Ile Lys Val Ser Xaa Met Leu Leu Gly Asp Xaa
          245          250          255
Asn Asp Ile Leu Xaa Leu Gly Ile
          260

```

<210> 43696

<211> 67

<212> PRT

<213> A.fumigatus

<400> 43696

```

Phe Gly Ser Ser Leu Phe Phe Lys Ser Ile Lys Val Phe Leu Phe Ile
1           5           10           15
Phe Thr Leu Ala Leu Ile Ile Ile Gly Thr Gly Asn Ile His Ala Ala
          20           25           30
Val Asn Arg Leu Ile Leu Ile Phe Thr Phe Arg Ser Asn Ile Cys Leu
          35           40           45
Thr Phe Gly Leu Leu Ile Ala Gly Arg Phe Phe His Leu Leu Val Thr
          50           55           60
Val Leu Val
65

```

<210> 43697

<211> 159  
 <212> PRT  
 <213> A.fumigatus

<400> 43697  
 Ile Ile Phe Ser Ser Asn Leu Arg Phe Leu Arg Leu Ile Ile Ile Phe  
 1 5 10 15  
 Cys Leu Ser Ser Ser Ser Ser Ser Leu Arg Phe Leu Ala Ala Ile Phe  
 20 25 30  
 Leu Ala Trp Glu Ala Phe Phe Leu Asp Pro Ser Ile Val Ala Pro Leu  
 35 40 45  
 Glu Glu Asn Gly Arg Pro Ala Val Ser Ala Ser Ser Ser Phe Trp Cys  
 50 55 60  
 Trp Val Arg Ala Ala Ser Ser Ser Ser Ser Asp Ser Glu Ala Ala Ser  
 65 70 75 80  
 Ser Ser Asn Pro Ser Lys Ser Ser Ser Ser Ser Ser Leu Ser Leu Ser  
 85 90 95  
 Ser Ser Ser Val Pro Ala Thr Ser Met Pro Pro Ser Thr Asp Ser Ser  
 100 105 110  
 Ser Ser Ser Leu Ser Asp Pro Thr Ser Ala Leu Pro Ser Ala Phe Leu  
 115 120 125  
 Ser Leu Val Ala Ser Ser Ile Ser Ser Ser Leu Ser Ser Ser Asn Ser  
 130 135 140  
 Ala Ser Pro Ser Ser Ser Cys Ser Ala Arg Leu Ala Leu Gly Ser  
 145 150 155

<210> 43698  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (31)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43698  
 Trp Leu Phe Trp Asp Thr Glu Arg Leu Ala Arg Leu Pro Leu Arg Ser  
 1 5 10 15  
 Pro Ile Asn Trp Ala Ser Thr Lys Gly Tyr Cys Val Arg Leu Xaa Ser  
 20 25 30  
 Trp Val Pro Phe Pro Pro Gln Ser Leu Ser Leu Ser Pro Cys Pro Arg  
 35 40 45  
 Asp Ile Val Tyr Ala Phe Thr Val Pro Phe Pro Leu Val Thr Leu Ala  
 50 55 60  
 Pro Gln Gly Val Val Ala Ser Leu Asp Ser Pro Thr Asn Gly Ser Thr  
 65 70 75 80  
 Gln Arg Ser Gly Leu Val Thr Gly Thr Gly Ala Asp Ser Asp Gly Gly  
 85 90 95

<210> 43699  
 <211> 229  
 <212> PRT  
 <213> A.fumigatus

<220>

19733

<221> UNSURE

<222> (96), (201)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43699

```

Gln Ile Leu Ala Ser Pro Ala Arg Ser Thr Ala His Asp Glu Pro Arg
1           5           10           15
Ala Thr Thr Thr Val Ile Val Pro Ala Thr Lys Ile Tyr Tyr Pro Pro
          20           25           30
Ser Glu Ser Ala Pro Val Pro Val Thr Ser Pro Asp Arg Trp Val Leu
          35           40           45
Pro Leu Val Gly Leu Ser Lys Asp Ala Thr Thr Pro Trp Gly Ala Asn
          50           55           60
Val Thr Ser Gly Asn Gly Thr Val Asn Ala Tyr Thr Ile Ser Leu Gly
65           70           75           80
Gln Gly Asp Ser Asp Asn Asp Cys Gly Gly Asn Gly Thr Gln Leu Xaa
          85           90           95
Ser Arg Thr Gln Tyr Pro Leu Val Asp Ala Gln Leu Ile Gly Asp Leu
          100          105          110
Asn Gly Asn Arg Ala Asn Leu Ser Val Ser Gln Asn Ser His His Ile
          115          120          125
Leu Asn Leu Gly Asn Asp Ser His Leu Thr Val Thr Thr Ser Ser Asp
          130          135          140
Asp Glu Asp Phe Pro Ile Ser Thr Val Pro Phe Gly Leu Asn Leu Gly
145          150          155          160
His Lys Gly Glu Trp Asn Gly Ser Leu Ala Leu Gly Gly Leu Tyr Asp
          165          170          175
Ala Asn Arg Leu Thr Asp Asp Ala Thr Ser Trp Ile Ser Ile Ala Glu
          180          185          190
Thr Met Asn Asn Asn Gly Thr Phe Xaa Gln Thr Gly Lys Gln Thr Leu
          195          200          205
Ser Arg Arg Arg Leu Pro Pro Arg Arg Leu Glu Gly Thr Ala Leu Gly
          210          215          220
Val Lys Arg Ala Arg
225

```

<210> 43700

<211> 130

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (47), (101), (110)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43700

```

Tyr Arg Ile His Ser Ile Leu Leu Tyr Arg Val Pro Ser Thr Lys Tyr
1           5           10           15
Pro Cys Asp Asp Val Thr Glu Thr Ile Ser Pro Ala His Val Ala Arg
          20           25           30
Ser Pro Arg Gly Ile Tyr Val Gly Leu Leu Leu Ala Val Leu Xaa Pro
          35           40           45
Thr Val Gln Leu Leu Val Val Asn His Leu Met Ile Asp His Tyr Pro
          50           55           60
Asp Phe Val Asp Val Cys Ala Thr Trp Leu Val Glu His Glu Leu Ser

```

## 19734

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Ile | Ser | Ser | Ala | Ile | Ala | Val | Gln | Met | Gln | Asp | Ser | Ile | Gly | Ser | Ser |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Ser | Val | Asn | Xaa | Ser | Ala | Lys | Leu | Ala | Arg | Met | Met | Xaa | Gln | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Lys | Arg | Ser | Tyr | Ser | Lys | Asp | Met | Asn | Ser | Gly | Leu | Trp | Ala | Leu | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Thr | Leu |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43701

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (43)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43701

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Val | Trp | Ser | Met | Ala | Arg | Ser | Ser | Gly | Gly | Glu | Leu | Leu | Thr | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Ile | Asn | Ala | Val | Pro | Gln | Ala | Phe | Ser | Lys | Ala | Leu | Ser | Ala | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Trp | Gln | Ile | Glu | Gly | His | Cys | Cys | Gln | Ile | Xaa | Ser | Leu | Thr | Ile | Asp |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ser | His | Ser | Arg | His | Leu | His | Leu | Ser | Gly | Thr | Val | Ala | Phe | Leu | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43702

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43702

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Leu | Pro | Pro | Lys | Arg | Pro | Tyr | Arg | Arg | Thr | Arg | Ser | Phe | Ser | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Glu | Ser | Pro | Asp | Glu | Leu | Ala | Val | Asp | Ala | Asp | Val | Tyr | Trp | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Ser | Arg | Asn | Arg | Gly | Arg | Ser | Pro | Ser | His | Ser | Glu | Thr | Ser | Ala | Gln |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Glu | Gln | Leu | Ser | Glu | Arg | Tyr | Gln | Asp | Asp | Glu | His | Glu | Ala | His | Asp |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Glu | Glu | Ser | Thr | Gln | Asp | Val |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43703

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43703

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Met | Tyr | Thr | Tyr | Ala | Val | Thr | Val | Pro | Ile | Ser | Ser | Leu | Phe | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Arg | Glu | Leu | Asp | Ile | Glu | Asp | Leu | Glu | Ser | Thr | Ala | Asp | Ala | Phe | Glu |

# 19735

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Leu | Lys | Val | Asp | Ile | Ala | Glu | Gly | Ala | Ser | Asp | Gly | Gln | Gly | Ile | Asp |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Ala | Leu | Ala | Asp | Arg | Ile | Ser | Gln | Ala | Val | Ala | Thr | Ile | Arg | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Ile | Val | Ile | Pro | Leu | Ile | Tyr | His | Val | Glu | Ser | Ser | Leu | Thr | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Val | Gly | Ser | Pro | Val | Gln | His | Asn | Gly | Pro | Leu | Arg | Arg | Ser | Asp | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Tyr | Leu | Ser | Leu | Ile | Lys | His | Gly | Leu | Arg | Leu | Ala | Pro | Glu | Tyr |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Thr | Val | Asp | Leu | Ser | Tyr | Ser | Asp | Asp | Ile | Leu | Ser | Gln | Val | Ile |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Ser | Lys | Gly | Thr | Ser | Lys | Val | Ile | Gly | His | Phe | Ala | Trp | Ser | His |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Cys | Pro | Lys | Gly | Trp | Glu | Asp | Ala | Glu | Pro | Leu | Ala | Met | Tyr | Glu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Ala | Arg | Arg | Leu | Gly | His | Gln | Pro | Pro | Asp | Gly | Arg | Ser | Ala | Ser |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |

Arg Glu

<210> 43704

<211> 84

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (80)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43704

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Val | Asn | Thr | Thr | Ser | Tyr | Ser | Ala | Pro | Leu | Phe | Cys | Met | Arg | Asn |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Ile | Ser | Leu | Ile | Glu | Ala | Pro | Ile | Asn | His | Ser | Thr | Glu | Leu | Arg |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Ala | Arg | Arg | Thr | Asp | Val | Phe | Phe | Phe | Cys | Ile | Leu | Ala | Tyr | Ile | Asp |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ile | Leu | Thr | Asn | Gly | Ile | Arg | Gly | Met | Leu | Thr | Val | Leu | Asp | Asn | Pro |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gln | Tyr | Val | Asn | Val | Thr | Val | Phe | Tyr | His | Lys | Gly | Pro | Lys | Asp | Xaa |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |

Arg Tyr Ala Tyr

<210> 43705

<211> 68

<212> PRT

<213> A.fumigatus

<400> 43705

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Thr | Asp | Asn | Met | Ser | Ser | Thr | Asp | Glu | Lys | His | Gly | Ile | Ser | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Glu | His | Gly | Ser | Pro | Gly | Ser | Asp | Thr | Asp | Asn | Lys | Pro | Ala | Gly | Leu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

## 19736

Val Gly Gln Gly Glu Ala Ala Lys Val Gly Gly Ala Lys Thr Arg Lys  
           35                          40                          45  
 Val Phe Asn Val Ser Tyr Leu Arg Ser Arg Pro Ser Thr Arg Ile Leu  
           50                          55                          60  
 Asn Asp Met Cys  
 65

<210> 43706  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 43706  
 His Asp Asn Pro Trp Ser Phe Val Ser Phe Cys Leu Ile Pro Arg Leu  
 1                  5                          10                          15  
 Pro Ala Thr Lys Leu Leu Ile Leu Tyr Lys Ser Ala His Phe Gln Leu  
                   20                          25                          30  
 Ser Tyr Ser Tyr Gln Arg Thr Leu Cys Leu Trp Lys Gly Val Leu Cys  
                   35                          40                          45  
 Glu Val Asp Ile Tyr Tyr Ile Ser Gln His Pro Gln Val Leu  
           50                          55                          60

<210> 43707  
 <211> 130  
 <212> PRT  
 <213> A.fumigatus

<400> 43707  
 Asp Asp Arg Gly Val Arg Ala Gly Tyr Ile Phe Thr Ala Cys Ile Pro  
 1                  5                          10                          15  
 Thr Thr Ile Ala Ser Asn Val Val Met Thr Arg Ser Ala Gly Gly Asp  
                   20                          25                          30  
 Asp Ala Ala Ala Leu Val Glu Val Val Ile Ala Asn Phe Leu Gly Pro  
                   35                          40                          45  
 Phe Ile Thr Ala Gly Trp Thr Val Thr Leu Leu Pro Thr Thr Ala Glu  
           50                          55                          60  
 Phe Asp Pro Trp Arg Gln Ala Asn Gly Asp Leu Ser Glu Met Tyr Lys  
 65                          70                          75                          80  
 Asp Val Phe Lys Gln Leu Gly Leu Ser Ala Leu Leu Pro Leu Val Ile  
                   85                          90                          95  
 Gly Gln Leu Val Arg Trp Ala Trp Pro Glu Gln Thr Glu Arg Val Met  
                   100                          105                          110  
 Gln Thr Tyr Arg Ile Ala Lys Leu Gly Ser Ala Cys Leu Leu Leu Ile  
           115                          120                          125  
 Val Trp  
 130

<210> 43708  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 43708  
 Phe Pro Ser Tyr Tyr Asn Gln Val Val Ala Ile Val Gln Ser Thr Leu  
 1                  5                          10                          15  
 Ile Phe Val Ala Val Ser Glu Gly Phe Gly Thr Ser Ile Asp Leu Leu



19737

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Val | Gln | Glu | Gln | Ile | Asn | Arg | Ile | Gln | Thr | Val | Arg | Gln | Pro | Ala | Ser |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Tyr | Thr | Ala | Arg | Asp | Ser | Thr | Leu | Thr | Ser | Ile | Gln | Leu | Val | Thr | Ile |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |
| Ser | Asp | Ile | Leu | Tyr | Leu | Ile | Thr | Ile | Tyr | Val | Ser | Lys | Cys | Cys | Val |
| 65  |     |     | 70  |     | 75  |     |     |     | 80  |     |     |     |     |     |     |
| Val | Gly | Ile | Tyr | Leu | Arg | Leu | Thr | Pro | Gln | Lys | Thr | His | Asn | Arg | Ile |
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Ser | Trp | Ala | Thr | Leu | Ile | Leu | Cys | Thr | Leu | Trp | Ile | Ile | Pro | Ser | Ala |
|     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |     |
| Leu |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43709  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus

<400> 43709

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Leu | Arg | Ala | Arg | Ile | Phe | Tyr | Ala | Arg | Arg | Cys | Asn | Thr | Asn | Pro |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Phe | Leu | Glu | Thr | Lys | Glu | Asp | Ser | Thr | Leu | Asn | Pro | Leu | Ser | Pro | Asn |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Phe | Lys | Ala | Lys | Asn | Trp | Met | Lys | Asn | Leu | Leu | Ala | Leu | Ser | Ser | Arg |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Asp | Pro | Glu | Arg | Tyr | Pro | Lys | Arg | Val | Ala | Gly | Val | Ala | Phe | Lys | Asn |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |
| Leu | Ser | Val | His | Gly | Tyr | Gly | Ser | Pro | Thr | Asp | Tyr | Gln | Lys | Asp | Val |
| 65  |     |     | 70  |     | 75  |     |     |     |     |     |     |     |     | 80  |     |
| Phe | Asn | Ser | Val | Leu | Glu | Val | Gly | Thr | Leu | Val | Arg | Arg | Ile | Met | Gly |
|     | 85  |     | 90  |     | 95  |     |     |     |     |     |     |     |     |     |     |
| Thr | Gly | Lys | Gln | Lys | Ile | Gln | Ile | Leu | Arg | Asp | Phe | Asp | Gly | Leu | Val |
|     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |     |
| Lys | Ser | Gly | Glu | Met | Leu | Val | Val | Leu | Gly | Arg | Pro | Gly | Ser | Gly | Cys |
|     | 115 |     | 120 |     | 125 |     |     |     |     |     |     |     |     |     |     |
| Ser | Thr | Leu | Leu | Lys | Thr | Ile | Ser | Gly | Glu | Met | Asn | Gly | Ile | Tyr | Met |
|     | 130 |     | 135 |     | 140 |     |     |     |     |     |     |     |     |     |     |
| Asp | Glu | Asn | Ser | Tyr | Leu | Asn | Tyr | His | Gly | Ile | Ser | Ser | Lys | Tyr | Ile |
| 145 |     |     | 150 |     | 155 |     |     |     |     |     |     |     |     |     | 160 |
| Val | Lys | Gln | Phe | Arg | Gly | Gly | Gly | Tyr | Leu | His | Cys |     |     |     |     |
|     | 165 |     | 170 |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43710  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 43710

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Phe | Lys | Asp | Asn | Gln | Asn | Gly | Glu | Gln | Gln | Ile | Ala | Ile | Arg | Glu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Phe | Leu | Met | Leu | Val | Tyr | Asn | Phe | Tyr | Leu | Asp | Glu | Ile | Leu | Ile | Leu |
|     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |     |
| Phe | Leu | Leu | His | Ser | Gly | Asp | Gly | Thr | Arg | Thr | Phe | Glu | Ile | Pro | Ser |
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Gln | Lys | Cys | Thr | Ile | Leu | Cys | Pro | Cys | Val | Ala | Leu | Ile | Ile | Gly | Phe |

## 19738

50 55 60  
 Phe Phe Ala Leu Val Gln  
 65 70

<210> 43711  
 <211> 62  
 <212> PRT  
 <213> A.fumigatus

<400> 43711  
 Ile Ala Val Val Ser Phe Ile His Ile Tyr Leu Ile Tyr Tyr Val Val  
 1 5 10 15  
 Leu Gln Gly Phe Cys Pro Ser Phe Gly Asp Ile Ile Arg His Asp Val  
 20 25 30  
 Glu Met His Glu Gln Thr Ile Gln Tyr Thr Met Arg Pro Ser Ser Gln  
 35 40 45  
 Glu Phe Leu Leu Ile Trp Lys Tyr Ile Pro Val Ile Lys Ala  
 50 55 60

<210> 43712  
 <211> 155  
 <212> PRT  
 <213> A.fumigatus

<400> 43712  
 Leu Thr Val Ser Val Thr Val Met Thr Leu Thr Gly Leu Thr Ile Lys  
 1 5 10 15  
 Gly Arg Cys Val Glu Leu Glu Val Ser Ile Ser Ser Gln Arg Gly Trp  
 20 25 30  
 Gly Thr Glu Glu Glu Thr Glu Ala Ala Glu Glu Val Glu Thr Val Ala  
 35 40 45  
 Glu Ala Val Val Glu Val Glu Ala Val Val Glu Ala Val Glu Ala Val  
 50 55 60  
 Glu Val Val Glu Val Val Glu Val Val Glu Val Val Glu Val Val Glu  
 65 70 75 80  
 Val Val Glu Val Val Glu Val Val Glu Val Val Glu Val Val Glu Val  
 85 90 95  
 Val Glu Val Val Glu Val Val Glu Val Val Glu Val Val Glu Val Val  
 100 105 110  
 Glu Val Val Glu Val Val Gln Val Val Glu Val Val Glu Val Val Glu  
 115 120 125  
 Val Val Lys Ile Val Glu Ala Val Glu Ala Val Gln Val Val Glu Ala  
 130 135 140  
 Val Val Lys Ala Val Val Glu Ala Val Ile Gln  
 145 150 155

<210> 43713  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

<400> 43713  
 Leu Leu Leu Leu Leu Leu Leu Arg Leu Leu Leu Leu Val Leu Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Phe Leu Leu Leu Leu Leu Leu Leu Leu Leu  
 20 25 30

## 19739

Leu Leu Val Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu  
 35 40 45  
 Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu  
 50 55 60  
 Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu  
 65 70 75 80  
 Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu  
 85 90 95  
 Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Ser Gln Leu Leu Leu  
 100 105 110  
 Leu Leu Leu Phe Leu Leu Gln Phe Pro Thr Leu Ala Val Arg Ile Tyr  
 115 120 125  
 Leu Pro Gln Val Leu Arg Thr Phe Leu  
 130 135

&lt;210&gt; 43714

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43714

Leu Tyr Asn Cys Phe Tyr Tyr Cys Phe Tyr Tyr Gly Phe Tyr Tyr Leu  
 1 5 10 15  
 Tyr Cys Phe Tyr Cys Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr  
 20 25 30  
 Tyr Phe Tyr Tyr Leu Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr  
 35 40 45  
 Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe  
 50 55 60  
 Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr  
 65 70 75 80  
 Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Tyr Phe Tyr Cys Phe Tyr Cys  
 85 90 95  
 Phe Tyr Tyr Cys Phe Tyr Phe Tyr Tyr Cys Phe Cys Tyr Cys Leu Asn  
 100 105 110  
 Phe Phe Cys Cys Phe Cys Phe Phe Phe Ser Ser Pro Pro Ser Leu  
 115 120 125

&lt;210&gt; 43715

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43715

Cys Ile Thr Ala Ser Thr Thr Ala Phe Thr Thr Ala Ser Thr Thr Cys  
 1 5 10 15  
 Thr Ala Ser Thr Ala Ser Thr Ile Phe Thr Thr Ser Thr Thr Ser Thr  
 20 25 30  
 Thr Ser Thr Thr Cys Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr Thr  
 35 40 45  
 Ser Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr Thr Ser  
 50 55 60  
 Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr  
 65 70 75 80  
 Thr Ser Thr Thr Ser Thr Thr Ser Thr Thr Ser Thr Ala Ser Thr Ala  
 85 90 95

## 19740

Ser Thr Thr Ala Ser Thr Ser Thr Thr Ala Ser Ala Thr Val Ser Thr  
 100 105 110  
 Ser Ser Ala Ala Ser Val Ser Ser Ser Val Pro His Pro Arg Cys Glu  
 115 120 125  
 Asp Ile Leu Thr Ser Ser Ser Thr His Leu Pro Leu Ile Val Ser Pro  
 130 135 140  
 Val Arg Val Ile Thr Val Thr Glu Thr Val Ser Tyr Thr Arg Thr Ala  
 145 150 155 160  
 Asn Pro Ser Ser Ile Arg His Ser Ile Ser Thr Ser Asp Ser Thr Ser  
 165 170 175  
 Glu Gly Asn

&lt;210&gt; 43716

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (8), (56)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43716

Asn Pro Thr Phe Xaa Trp Val Xaa Pro Gln Pro Ser Gly Pro Ser Phe  
 1 5 10 15  
 Ser Phe Arg Arg Ser Arg Ser Lys Glu Val Arg Glu Ala Met Arg Asn  
 20 25 30  
 Gln Gly Arg Ser Arg Met Leu Leu Pro Ala Glu Phe Gln Pro Lys Thr  
 35 40 45  
 Gly Ser Gly Lys Thr Ile Glu Xaa Tyr Thr Arg Glu Ile Asn Thr Leu  
 50 55 60  
 Pro His Phe Gly Leu Ser Glu Asn Leu Val Leu Asp Val Val Glu Glu  
 65 70 75 80  
 Leu Glu Ala Glu Gln Arg His Lys Cys Leu Ser Glu Glu Trp Ala Gly  
 85 90 95  
 Phe Ser Ser Asn Gly Thr Glu Pro Thr Pro Ala Thr Thr Thr Asp Asn  
 100 105 110  
 Asp Ser Thr Thr Ser Gly Asn Ser Ser Ala Val Gly Ser Asp Ala Asp  
 115 120 125  
 Glu Ser Thr Ser Gly Ser Arg Ser Arg Ser Lys Gly Ser Ser Asn Thr  
 130 135 140  
 Ala Ser Thr Ser Ser Thr Ala Asp Phe Glu Ser Leu Ile Glu Ser Thr  
 145 150 155 160  
 Ser Thr Ser Thr Thr Thr Phe Thr Ser Tyr Leu Glu Val Val Pro Glu  
 165 170 175  
 Cys Ile Lys Val Ser Val Phe Thr Thr Gly Leu Glu Gly Pro Thr Leu  
 180 185 190  
 Arg Val

&lt;210&gt; 43717

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19741

<220>

<221> UNSURE

<222> (10), (27)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43717

```

Ser Gly Thr Gly Met Phe Gly Pro Gly Xaa Arg Ser Gly Pro Arg Thr
1      5      10      15
Gly Ala Phe Val Gly Gly Lys Arg Pro Gly Xaa Pro Asn Ser Leu Lys
      20      25      30
Ser Asn Gly Pro Gln Tyr Asp Leu Gly Ser Gln Ser Leu Tyr Tyr Ile
      35      40      45
Ala Pro Ala Pro Lys Ser Gln Gly Gly Gly Ala Gln Arg Ser Leu Gln
      50      55      60
Arg Ala Pro Gly Gln Ser Ala Ala Ser Leu Ile Asp Ala Asp Asp Glu
65      70      75      80
Asp Pro Phe Ile Ala Ala Gly Met Ile Gly Arg Gly Ala Glu Ser Lys
      85      90      95
Glu Glu Arg Phe Arg Arg Arg Leu Val Gln Gln Gln Arg Glu Arg Asp
      100     105     110
Ile Thr Gln Lys Leu Val Thr Ser Arg Ala Gly Asn Val Gly Ala Glu
      115     120     125
Tyr Leu Arg Ser Arg Ala Asn Lys Pro Thr Thr Ser Ser Gln Pro Glu
      130     135     140
Ser Ala Ala Ser Ser Ser Gln Glu Lys Ser Ser Phe Glu Ala Ser Thr
145     150     155     160
Pro Val Ser Ala Thr Ser Leu Gly Leu Thr Gly Phe Arg Arg Ala Asp
      165     170     175
Thr Val Lys Leu Ser Pro Leu Lys Arg Ala Tyr Asp Gly Asp Lys Gln
      180     185     190
His Asn Gly Ser Val Lys Lys Thr Arg Phe Ile Thr Ser Ser Ser Pro
      195     200     205
Arg Leu Gln Glu Pro Ser Arg Gln
      210     215

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<210> 43718

<211> 160

<212> PRT

<213> A.fumigatus

<400> 43718

```

Arg Gly Cys Gly Ala Pro Val Val Lys Thr Ile Asp Ser Leu Thr Ala
1      5      10      15
Leu Cys Arg Ser Ser Gly Pro Ser Gly Gly Thr Leu Asn Thr Val Leu
      20      25      30
Thr Ile Phe Asp Ser Leu Ser Phe Ser Asp Ile Leu Lys Ser Thr Asp
      35      40      45
Pro Phe Ala Leu Ala Ala Ser Ala Pro Pro Lys Asn Val Pro Ser Glu
      50      55      60
Pro Leu Val Asp Lys Ile Leu Gly Val Arg Ser Val Arg Asp Leu Gly
65      70      75      80
Thr Leu Thr Thr Ser Pro Ser Ala Met Ala Asp Ile Thr Ile Val His
      85      90      95
Arg Ser Ser Thr Leu Met Pro Glu Phe Tyr Gly Pro Leu Phe Tyr Phe
      100     105     110
Arg Gln Phe Val Lys Val Arg Asn Ala Leu Val Gly Ile Ile Phe His

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## 19742

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
|     | 115 |     | 120 |     | 125 |     |
| Tyr | Ala | Phe | Ile | Ile | Gly | Leu |
|     | 130 |     |     |     | 135 |     |
| Ala | Leu | Val | Arg | Gln | Phe | Val |
| 145 |     |     |     | 150 |     |     |
|     |     |     |     |     | 155 |     |
|     |     |     |     |     |     | 160 |

&lt;210&gt; 43719

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (8)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43719

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Phe | Leu | Arg | Leu | Gly | Val | Xaa | Lys | Arg | Arg | Glu | Arg | Gly | Arg | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Gly | Leu | Pro | Asp | Leu | Pro | Pro | Ala | Ser | Glu | Lys | Asp | Glu | Ser | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Gly | Glu | Asp | Glu | Val | Asp | Ile | Pro | Asp | Glu | Glu | Leu | Asn | Gln | Lys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Arg | Asp | Leu | Lys | Glu | Pro | Ile | Cys | Leu | Phe | Gly | Glu | Asn | His | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Arg | Leu | Arg | Arg | Tyr | Arg | Arg | Leu | Val | Arg | Arg | Ser | Met | Thr | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Gln | Pro | Lys | Val | Thr | Asp | Gly | Pro | Ile | Pro | Thr | Thr | Leu | Glu | Pro | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Glu | Val | Asp | Met | Lys | Ile | Pro | Thr | Thr | Leu | Pro | Lys | Asp | Ala | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Arg | Lys | Phe | Leu | Phe | Arg | Gln | Leu | Ala | Ser | Tyr | Phe | Asn | Met | Val |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Leu | Glu | Trp | Glu | Arg | Ala | Leu | Ala | Arg | Arg | Asp | Ala | Ser | Val | Lys |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gln | Ser | Leu | Thr | Gly | Arg | Gln | Ala | Tyr | Asn | Ala | Met | Val | Gln | Ser | Arg |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Glu | Asn | Leu | Lys | Pro | Leu | Phe | Arg | Lys | Phe | Glu | Lys | Asn | Asp | Ile | Asp |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asp | Asn | Leu | Leu | Glu | Pro | Ile | Met | Glu | Ile | Val | His | Asn | Ala | Gln | Leu |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     | 190 |     |     |     |
| Arg | Arg | Tyr | Val | Asp | Ala | His | Asp | Ala | Tyr | Leu | Arg | Val | Ser | Ile | Gly |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Lys | Ala |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 210 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43720

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (94), (174)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

## 19743

&lt;400&gt; 43720

Lys Ser Asp Thr Thr Lys Ser Asp Pro Val Asn Glu Asp Pro Val Pro  
 1 5 10 15  
 Pro Glu Gly Leu Tyr Val Lys Lys Val Ser Pro Val Ser Glu Val Ser  
 20 25 30  
 Ser Gln Leu Ala His Trp Glu His Val Lys Pro Ser Ser Leu Leu Ser  
 35 40 45  
 Ser Lys Pro His His Asp Ser Ser Val Tyr Lys Glu Leu Val Asp Lys  
 50 55 60  
 Phe Cys Phe Tyr Gly Ser Thr Lys Gly Ser Asn Gly Thr Asn Asp Ser  
 65 70 75 80  
 Leu Ser Asn Gly Lys Ser His Pro Asp Pro Pro Ser Thr Xaa Ser Thr  
 85 90 95  
 Ser Pro Ala Gln Ser Leu Ser Pro Pro Leu Ser Pro Arg Ser Thr Glu  
 100 105 110  
 Val Leu Gly Ile Asp Tyr Gly Asn Ser Cys Ser Ser Ser Ala Ser Pro  
 115 120 125  
 Val Ser Ser Ser Pro Arg Ala Ala Ser Ser Ser Pro Pro His Phe Asp  
 130 135 140  
 Tyr Ala His His Ser His Val Gln Ser Asn Phe Leu Lys Glu Ser Ser  
 145 150 155 160  
 Thr Pro Ala Val Ile Arg Gly Cys Val Trp Leu Phe Gln Xaa  
 165 170

&lt;210&gt; 43721

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43721

Leu Thr Gly Lys Met Ser Val Gly Ala Arg Asp Leu Ser Met Asn Glu  
 1 5 10 15  
 Phe Arg Glu Lys Gln Glu Val Lys Val Met Ile Ala Ser Leu Met Ala  
 20 25 30  
 Gly Gly Thr Gly Ile Asp Met Ser Met Ala Asn Lys Cys Ile Leu Val  
 35 40 45  
 Asp Leu Trp Trp Asn Glu Ala Val Gln Gln Gln Val Arg Ile Cys Leu  
 50 55 60  
 Arg Thr Thr Glu Asn Thr Arg Ser Asn Trp  
 65 70

&lt;210&gt; 43722

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43722

Leu Ser Gln Ala Phe Cys Arg Leu Tyr Arg Ile Gly Gln Glu Lys Val  
 1 5 10 15  
 Val Glu Val Val Lys Ile Ile Val His Asn Thr Ile Asp Asp Tyr Ile  
 20 25 30  
 Leu Gln Leu Gln Thr Lys Lys Ser Val Asn Ile Asn Lys Ala Ile Gly  
 35 40 45  
 Glu Glu Ala Leu His Lys Arg Asp Lys Ile Ile Asp Leu Leu Lys Met  
 50 55 60  
 Phe Ala Glu Val Glu Val Pro Asp Asn Gly Gly Ile

## 19744

65

70

75

&lt;210&gt; 43723

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43723

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Lys | Tyr | Val | Ala | Tyr | Val | Ser | Pro | Asn | Tyr | Asp | Gly | Thr | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Glu | Ser | Met | Val | Pro | Lys | Val | Gly | Glu | Phe | Leu | Ala | Val | Asp | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Glu | Arg | Ala | Leu | Leu | Arg | Ala | Tyr | Gln | Tyr | Ala | Asp | Asn | Arg | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Asp | Asp | Glu | Thr | Arg | Lys | Leu | Cys | Leu | Arg | Trp | Asp | Ile |     |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43724

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43724

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ser | Val | Ala | Thr | Leu | Ser | Ile | Val | Ser | Tyr | His | Lys | Asp | Pro | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Val | Asp | Phe | Gly | Arg | Gln | Leu | Ala | Ala | Ser | Ala | Trp | Leu | Leu | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Met | Cys | Ala | Ala | Ala | Leu | Gly | Gly | Val | Asn | Asp | Ala | Lys | Val | Trp | Gly |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Asn | Arg | Ala | Leu | Val | Arg | Arg | Asn | Thr | Tyr | Gly | Glu | Ser | Ala | Cys | Trp |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Tyr | Ala | Ser | Leu | Val | Ala | Arg | Leu | Thr | Val | Pro | Ile | Ala | Tyr | Asn | Phe |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Thr | Phe | Leu | Pro | Leu | Ser | Val | Arg | Gln | Asn | Thr | Ile | Phe | Tyr | His |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Phe | Leu | Gly | Arg | Leu | Ile | Asp | Leu | Thr | Pro | Leu | Gly | Gln | Gly | Tyr | Asp |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Tyr | Phe | Phe | Pro | Val | Phe | Ile | Leu | Leu | Pro | Val | Phe | Ala | Thr | Leu | Phe |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Asn | Leu | Tyr | Gly | Arg | Ile | Lys | Asn | Val | Cys | Gly | Leu | Gly | Leu | Ile | Glu |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Glu | Asp | Asp | Asn | Glu | Leu | Glu | Ser | Asn | Pro | Ser | Gly | Tyr | Gly | Leu | Ala |
| 145 |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |     |
| Gly | Cys | Leu | His | Ala | Thr | Glu | Leu | Ala | Glu | Ser | Ala | Leu | Met | Leu |     |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |

&lt;210&gt; 43725

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (48)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.



19745

<400> 43725

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Arg | Leu | Phe | Pro | Thr | Thr | Cys | Pro | Leu | Thr | Ser | Asn | Asp | Glu | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Met | Phe | Ser | Phe | Met | Glu | Pro | Leu | Leu | His | Phe | Thr | Met | Gly | Gly | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Ile | Asn | Glu | His | Val | Gln | Val | Phe | Asn | Ser | Glu | Lys | Lys | Pro | Xaa |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Asn | Val | Leu | Tyr | Ala | Cys | Gly | Glu | Leu | Ala | Gly | Gly | Val | His | Gly | Ala |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Arg | Leu | Gly | Gly | Ser | Ser | Leu | Leu | Gly | Cys | Val | Val | Tyr | Gly | Arg |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Val | Ala | Gly | Asp | Ser | Ala | Ser | Gln | Tyr | Leu | Phe | Lys | Lys | Leu | Thr | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |
| Gly | Ser | Thr | Thr | Ala | Gln | Gln | Arg | Leu | Gly | Gln | Ile | Ser | Leu | His | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Asp | Pro | Ser | Thr | Pro | Gly | Lys | Ile | Ser | Val | Glu | Trp | Asn | Gly | Ala | Ala |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     |     | 125 |     |     |
| Ala | Ser | Gly | Ala | Gly | Ser | Ala | Gln | Val | Thr | Ala | Ala | Pro | Glu | Ala | Val |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gln | Thr | Gly | Gly | Gln | Gly | Ala | Pro | Ala | Pro | Ala | Ala | Ala | Ala | Ser | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Pro | Asn | Asp | Ile | Ser | Asn | Phe | Lys | Ile | Pro | Glu | Lys | Glu | Tyr | Thr | Met |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |
| Glu | Glu | Val | Ala | Lys | His | Asn | Lys | Lys | Asp | Asp | Leu | Trp | Ile | Val | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Gly | Val | Val | Leu | Asp | Val | Thr | Asn | Trp | Leu | Asp | Glu | His | Pro | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly | Ala | Asn | Ala | Leu | Phe | Asn | Phe | Met | Gly | Arg | Asp | Ala | Thr | Glu | Gly |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Met | Ser | Ser | His | Pro | Arg | Thr | Thr | Arg | Arg | Pro | Cys |     |     |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     |     |

<210> 43726

<211> 103

<212> PRT

<213> A.fumigatus

<400> 43726

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Arg | Ser | Val | Pro | Ser | Val | Ser | Glu | Ser | Asp | Ser | Gln | Ser | His | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Met | Ala | Asp | Asp | Lys | Lys | Thr | Asn | Glu | Tyr | Thr | Ile | Glu | Met | Asp | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Asp | His | Gly | Asn | Lys | Asp | Phe | Glu | Ala | Pro | Ala | Pro | Ala | Val | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Pro | Arg | Gly | Pro | Pro | Val | Ala | Gln | Leu | Ala | Asn | Asn | Pro | Ile | Leu | Pro |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Val | Leu | Ala | Tyr | Cys | Gly | Ser | Ser | Ile | Leu | Met | Thr | Val | Met | Asn | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Tyr | Val | Leu | Ser | Gly | Arg | Asp | Phe | Asn | Leu | Asn | Phe | Phe | Leu | Leu | Cys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Gln | Val | Ser | Trp | Ser | Asp |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     | 100 |     |     |     |     |     |     |     |     |     |     |

<210> 43727

<211> 327

<212> PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (250)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43727

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Trp | Arg | Ala | Pro | Ser | Ser | Pro | Val | Val | Lys | Thr | Arg | Met | Gln | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Thr | Gly | Leu | Gln | Glu | Gly | Thr | His | Met | Gln | Glu | Gly | Thr | Gly | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Glu | Gly | Thr | Gln | Met | Gln | Glu | Gly | Thr | Gly | Leu | Gln | Glu | Gly | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Leu | Gln | Glu | Gly | Thr | Gln | Met | Lys | Glu | Gly | Ala | Gly | Leu | Arg | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Met | Gln | Ile | Lys | Glu | Gly | Ala | Gly | Leu | Arg | Glu | Glu | Thr | Trp | Met |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Trp | Glu | Gly | Thr | Arg | Met | Gln | Glu | Gly | Met | Arg | Thr | Gln | Glu | Gly | Thr |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Leu | Gln | Glu | Gly | Ser | Arg | Met | Gln | Glu | Gly | Thr | Gly | Leu | Gln | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Ala | Val | Leu | Gln | Glu | Arg | Ala | Glu | Leu | Gln | Glu | Gly | Thr | Ala | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gln | Lys | Glu | Met | Gln | Met | Gln | Glu | Gly | Thr | Gln | Met | Gln | Glu | Gly | Thr |
|     |     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Gln | Val | Gln | Glu | Gly | Thr | Gln | Met | Gln | Glu | Gly | Thr | Gly | Leu | His | Glu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Glu | Met | His | Glu | Gly | Val | Gln | Val | Gln | Glu | Gly | Leu | Glu | Leu | Gln | Asp |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Thr | Gln | Met | Gln | Glu | Gly | Ala | Gln | Met | Gln | Glu | Ala | Thr | Gly | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Gln | Lys | Glu | Met | Gln | Met | Gln | Glu | Gly | Met | Gln | Met | His | Glu | Glu | Met |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gln | Met | Gln | Glu | Gly | Met | Gln | Val | Gln | Asp | Gly | Thr | Gly | Leu | His | Glu |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Gly | Ala | Ala | Leu | Glu | Gly | Thr | Gly | Leu | Gln | Glu | Glu | Met | Gln | Met | Gln |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Glu | Gly | Val | His | Val | Gln | Asp | Trp | Ser | Xaa | Leu | Glu | Asp | Gly | Thr | Gln |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Met | Gln | Glu | Ser | Phe | Gly | Leu | His | Glu | Gly | Lys | Gln | Ile | Gln | Glu | Gly |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Thr | Arg | Val | Gln | Glu | Gly | Thr | Arg | Val | Gln | Glu | Gly | Ala | Gln | Gly | Gln |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Glu | Arg | Asp | Pro | Val | Ala | Gly | Arg | Asp | Thr | Arg | Pro | Gly | Gly | Asp | Arg |
|     |     | 290 |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Ala | Gly | Arg | Arg | Ile | Ser | Asn | Ser | Pro | Gly | Gly | Gly | Gly | Pro | Arg | Gly |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Val | Gly | Ala | Phe | Met | Lys | Gly |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 325 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43728

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19747

<220>

<221> UNSURE

<222> (181)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43728

```

Arg Arg Gly Arg Gly Cys Gly Arg Arg Arg Gly Cys Gly Arg Ala Arg
1          5          10          15
Gly Cys Arg Arg Gly Cys Gly Arg Arg Arg Gly Arg Ser Cys Arg Arg
          20          25          30
Gly Arg Gly Cys Arg Arg Gly Leu Gly Cys Arg Arg Glu Arg Cys Cys
          35          40          45
Arg Arg Glu Arg Ser Cys Arg Arg Gly Arg Arg Cys Arg Arg Arg Cys
          50          55          60
Arg Cys Arg Arg Gly Arg Arg Cys Arg Arg Gly Arg Arg Cys Arg Arg
65          70          75          80
Gly Arg Arg Cys Arg Arg Gly Arg Gly Cys Thr Arg Arg Cys Met Arg
          85          90          95
Gly Cys Arg Tyr Arg Arg Gly Trp Ser Cys Arg Thr Gly His Arg Cys
          100          105          110
Arg Arg Gly Arg Arg Cys Arg Arg Arg Arg Gly Cys Arg Arg Arg Cys
          115          120          125
Arg Cys Arg Arg Gly Cys Lys Cys Met Arg Arg Cys Lys Cys Arg Arg
          130          135          140
Gly Cys Arg Cys Lys Met Gly Arg Gly Cys Met Arg Glu Arg Arg Trp
          145          150          155          160
Arg Gly Arg Gly Tyr Arg Arg Arg Cys Arg Cys Arg Arg Gly Cys Thr
          165          170          175
Tyr Arg Thr Gly Xaa Gly Leu Lys Met Gly His Lys Cys Arg Lys Ala
          180          185          190
Leu Gly Cys Thr Lys Gly Ser Lys Ser Lys Arg Gly Leu Gly Cys Arg
          195          200          205
Arg Glu Pro Gly Cys Arg Lys Val Arg Lys Ala Arg Lys Gly Thr Arg
          210          215          220
Leu Gln Glu Gly Thr His Val Gln Glu Gly Thr Gly Leu Ala Glu Glu
          225          230          235          240

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<210> 43729

<211> 162

<212> PRT

<213> A.fumigatus

<400> 43729

```

Met Ala Arg Thr Phe Gln Pro Arg Gly Glu Asp Ala Asp Ala Arg Gly
1          5          10          15
Asp Trp Ala Pro Gly Gly Asp Ala His Ala Gly Gly Asp Arg Ala Ala
          20          25          30
Gly Gly Asp Ala Asp Ala Gly Gly Asp Trp Ala Ala Gly Gly Asp Trp
          35          40          45
Ala Ala Gly Gly Asp Ala Asp Glu Gly Gly Gly Gly Ala Ala Gly Gly
          50          55          60
His Ala Asp Lys Gly Gly Gly Gly Ala Ala Gly Gly Asp Val Asp Val
65          70          75          80
Gly Gly His Ala Asp Ala Gly Gly Asp Ala Asp Ala Gly Gly Asp Gly
          85          90          95
Ala Ala Gly Gly Val Ala Asp Ala Gly Gly Asp Trp Ala Ala Gly Gly

```

## 19748

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |     |
| Ser | Gly | Ala | Gly | Glu | Ser | Gly | Ala | Ala | Gly | Gly | Asp | Gly | Ala | Ala |     |
|     | 115 |     | 120 |     | 125 |     |     |     |     |     |     |     |     |     |     |
| Glu | Gly | Asp | Ala | Asp | Ala | Gly | Gly | Asp | Ala | Asp | Ala | Gly | Gly | Asp | Ala |
|     | 130 |     | 135 |     | 140 |     |     |     |     |     |     |     |     |     |     |
| Gly | Ala | Gly | Gly | Asp | Ala | Asp | Ala | Gly | Gly | Asp | Gly | Ala | Ala | Arg | Gly |
| 145 |     |     | 150 |     | 155 |     |     |     |     |     |     |     |     | 160 |     |
| Asp | Ala |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43730

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43730

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Arg | Pro | Leu | Gln | Arg | Arg | Ser | Leu | Met | Gln | Pro | Arg | Pro | Ile | Leu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |
| His | Leu | His | Pro | Leu | Leu | His | Leu | His | Leu | Leu | Met | His | Leu | His | Pro |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Leu | Leu | His | Leu | His | Leu | Leu | Leu | Gln | Pro | Arg | Arg | Leu | Leu | His | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Arg | Pro | Leu | Leu | His | Leu | Cys | Pro | Val | Leu | Gln | Leu | Gln | Pro | Leu | Leu |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Tyr | Leu | His | Pro | Leu | Met | His | Leu | Leu | Val | Gln | Pro | Arg | Pro | Leu | Leu |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| His | Leu | Arg | Pro | Leu | Leu | His | Leu | Arg | Pro | Leu | Leu | His | Leu | Arg | Pro |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Leu | Leu | His | Leu | His | Leu | Leu | Leu | Gln | Arg | Arg | Pro | Leu | Leu | Gln | Leu |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Arg | Ser | Leu | Leu | Gln | His | Arg | Ser | Leu | Leu | Gln | Pro | Ser | Pro | Leu | Leu |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| His | Pro | Arg | Pro | Leu | Leu | Gln | Leu | Arg | Pro | Leu | Leu | Arg | Pro | His | Pro |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Leu | Leu | His | Pro | Arg | Ala | Leu | Pro | His | Pro | Arg | Leu | Leu | Pro | Gln | Pro |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Arg | Pro | Leu | Leu | Tyr | Leu | His | Ala | Leu | Pro | Gln | Pro | Arg | Pro | Leu | Leu |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| His | Leu | Arg | Pro | Leu | Leu | Gln | Pro | Ser | Pro | Leu | Leu | Gln | Pro | Ser | Pro |
|     |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |
| Leu | Leu | His | Leu | Arg | Pro | Leu | Leu | Gln | Pro | Gly | Pro | Leu | Leu | His | Val |
|     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| Arg | Pro | Leu | Leu | Glu | Pro | Ser | Pro | Leu | Leu | His | Pro | Arg | Leu | His | His |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |
| Gly | Ala | Gly | Arg | Cys | Ala | Pro | Phe |     |     |     |     |     |     |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43731

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (78)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43731

Pro Phe Ile Lys Ala Pro Thr Pro Leu Gly Pro Pro Pro Pro Gly Leu  
 1 5 10 15  
 Leu Leu Ile Leu Leu Pro Ala Arg Ser Pro Pro Gly Arg Val Ser Leu  
 20 25 30  
 Pro Ala Thr Gly Ser Leu Ser Trp Pro Cys Ala Pro Ser Cys Thr Arg  
 35 40 45  
 Val Pro Ser Cys Thr Arg Val Pro Ser Trp Ile Cys Phe Pro Ser Cys  
 50 55 60  
 Ser Pro Lys Leu Ser Cys Ile Cys Val Pro Ser Ser Ser Xaa Asp Gln  
 65 70 75 80  
 Ser Cys Thr Cys Thr Pro Ser Cys Ile Cys Ile Ser Ser Cys Ser Pro  
 85 90 95  
 Val Pro Ser Ser Ala Ala Pro Ser Cys Ser Pro Val Pro Ser Cys Thr  
 100 105 110  
 Cys Ile Pro Ser Cys Ile Cys Ile Ser Ser Cys Ile Cys Ile Pro Ser  
 115 120 125  
 Cys Ile Cys Ile Ser Phe Cys Ser Pro Val Ala Ser Cys Ile Cys Ala  
 130 135 140  
 Pro Ser Cys Ile Cys Val Pro Ser Cys Ser Ser Asn Pro Ser Cys Thr  
 145 150 155 160  
 Cys Thr Pro Ser Cys Ile Ser Ser Cys Ser Pro Val Pro Ser Cys Ile  
 165 170 175  
 Cys Val Pro Ser Cys Thr Cys Val Pro Ser Cys Ile Cys Val Pro Ser  
 180 185 190  
 Cys Ile Cys Ile Ser Phe Cys Ser Ala Val Pro Ser Cys Ser Ser Ala  
 195 200 205  
 Leu Ser Cys Ser Thr Ala Pro Ser Cys Ser Pro Val Pro Ser Cys Ile  
 210 215 220  
 Arg Asp Pro Ser Cys Ser Ser Val Pro Ser Cys Val Arg Ile Pro Ser  
 225 230 235 240  
 Cys Ile Arg Val Pro Ser His Ile His Val Ser Ser Arg Ser Pro Ala  
 245 250 255  
 Pro Ser Phe Ile Cys Met Pro Ser Arg Ser Pro Ala Pro Ser Phe Ile  
 260 265 270  
 Cys Val Pro Ser Cys Ser Pro Val Pro Ser Cys Ser Pro Val Pro Ser  
 275 280 285  
 Cys Ile Cys Val Pro Ser Cys Ser Pro Val Pro Ser Cys Met Cys Val  
 290 295 300  
 Pro Ser Trp Ser Pro Val Pro Ser Cys Ile Arg Val Phe Thr Thr Gly  
 305 310 315 320  
 Leu Glu Gly Ala Arg His  
 325

&lt;210&gt; 43732

&lt;211&gt; 323

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (75)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43732

## 19750

Arg Pro Arg Pro Leu Trp Asp Leu Pro Pro Pro Gly Tyr Cys Leu Phe  
 1 5 10 15  
 Phe Cys Gln Pro Gly Pro Leu Leu Asp Val Cys Pro Phe Leu Gln Pro  
 20 25 30  
 Gly Pro Phe Pro Gly Leu Ala His Leu Pro Ala Pro Gly Phe Pro Pro  
 35 40 45  
 Ala Pro Glu Ser Pro Leu Gly Phe Ala Ser Leu Arg Ala Ala Gln Ser  
 50 55 60  
 Phe Pro Ala Phe Val Ser His Leu Gln Ala Xaa Thr Ser Pro Val Arg  
 65 70 75 80  
 Ala Pro Pro Pro Ala Ser Ala Ser Pro Pro Val Ala Pro Ser Pro Pro  
 85 90 95  
 Ala Pro Leu Pro His Ala Ala Pro Ser His Leu Ala Pro Ala Ser Pro  
 100 105 110  
 Pro Ala Phe Ala Ser Pro His Ala Phe Ala Ser Pro Pro Ala Ser Ala  
 115 120 125  
 Ser Pro Ser Ala Ala Pro Ser Pro Pro Ala Ser Ala Pro Pro Pro Ala  
 130 135 140  
 Ser Val Ser Arg Pro Ala Ala Pro Thr Pro Pro Val Pro Ala Pro Pro  
 145 150 155 160  
 His Ala Ser Pro Arg Ala Ala Pro Ser Pro Pro Ala Ser Ala Ser Pro  
 165 170 175  
 Pro Ala Pro Ala Ser Pro Pro Ala Ser Ala Ser Pro Pro Ala Ser Ala  
 180 185 190  
 Ser Pro Ser Ala Ala Pro Ser Pro Pro Ala Ala Pro Leu Ser Pro Ala  
 195 200 205  
 Ala Pro Leu Pro Pro Ala Ala Gln Ser Pro Pro Ala Ser Ala Thr Pro  
 210 215 220  
 Pro Ala Ala Pro Ser Pro Pro Ala Ser Ala Ser Pro Pro Ala Ser Ala  
 225 230 235 240  
 Cys Pro Pro Thr Ser Thr Ser Pro Pro Ala Ala Pro Pro Pro Pro Leu  
 245 250 255  
 Ser Ala Cys Pro Pro Ala Ala Pro Pro Pro Ser Ser Ala Ser Pro  
 260 265 270  
 Pro Ala Ala Gln Ser Pro Pro Ala Ala Gln Ser Pro Pro Ala Ser Ala  
 275 280 285  
 Ser Pro Pro Ala Ala Arg Ser Pro Pro Ala Cys Ala Ser Pro Pro Gly  
 290 295 300  
 Ala Gln Ser Pro Leu Ala Ser Ala Ser Ser Pro Arg Gly Trp Lys Val  
 305 310 315 320  
 Arg Ala Ile

&lt;210&gt; 43733

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43733

Thr Asp Leu Tyr Ser Met Ile Gly Ser Ile Lys Ser Ile Phe Trp Leu  
 1 5 10 15  
 Phe Asn His Lys Glu Leu Val Lys Val Val Asp Asp Pro Ala Cys Ile  
 20 25 30  
 Leu Glu Asp Glu Ile Ile Ala Ile Pro Arg Asn Ile Asn Pro Met Gly  
 35 40 45  
 Phe Leu Met Ser Tyr Tyr Ser Glu Leu Glu Lys Met Pro Leu Phe Ile

[illegible]

```
<210> 43734
<211> 64
<212> PRT
<213> A.fumigatus
```

```
<210> 43735
<211> 72
<212> PRT
<213> A.fumigatus
```

```
<210> 43736
<211> 307
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (12),(18),(19),(21),(22)
<223> Identity of amino acid sequences at the above locations are unknown.
```

```

<400> 43736
Gly Gly Arg Gly Gly Arg Ala Ile Asp Arg Ser Xaa His Gly Cys Val
 1                    5                10              15
Ala Xaa Xaa Arg Xaa Xaa Gly Trp Val Ser Val Asn Val Glu Asn Leu
                20                25              30
Ser Ile Ile Pro Phe Arg Asp Ser Ser Gln Gly Ala Gly Leu Pro Leu
                35                40              45
Leu Ser Arg Val Ser Asn Val Phe Ala Pro Thr Pro Ile Asp Pro Phe

```

## 19752

50 55 60  
 Lys Val Ala Glu Asn Gly Leu Asp Ser Ile Tyr Val Ser Ala Lys Ser  
 65 70 75 80  
 Gln Met Met Glu Thr Val Val Thr Val Ile Pro Pro Ile Lys Tyr Lys  
 85 90 95  
 Leu Glu Tyr Pro Ser Val His Tyr Ala Ala Leu Gly Glu Ser Arg Thr  
 100 105 110  
 Phe Asp Ile Glu Tyr Thr Asp Gln Phe Leu Asp Ala Val Gly Gly Arg  
 115 120 125  
 Val Ile Glu Ser Leu Leu Lys Ser Ile Glu Asp Pro Ile Ile Ser Lys  
 130 135 140  
 Trp Ile Ile Ala Ala Leu Thr Leu Ser Ile Ile Leu Asn Gly Tyr Leu  
 145 150 155 160  
 Phe Asn Ala Ala Arg Trp Ser Ile Lys Glu Pro Glu Val Ala Pro Val  
 165 170 175  
 Pro Ala Ala Pro Thr Val Ala Val Val Glu Ala Lys Lys Glu Tyr Pro  
 180 185 190  
 Lys Ile Asp Leu Asn Pro Asp Thr Pro Lys Lys Ser Leu Glu Lys Cys  
 195 200 205  
 Glu Ala Phe Leu Lys Glu Lys Arg Ala Ala Tyr Leu Ser Asp Glu Glu  
 210 215 220  
 Leu Ile Glu Leu Ser Leu Arg Gly Lys Ile Pro Gly Tyr Ala Leu Glu  
 225 230 235 240  
 Lys Asn Met Glu Lys Glu Asp Leu Leu Asp Pro Gly Trp Met Arg Phe  
 245 250 255  
 Gln Leu Lys Asn Gly Pro Lys Asn Ser Gly Pro Asn Pro Gly Trp Phe  
 260 265 270  
 Gly Ser Gln Asn Ser Pro Ala Pro Leu Phe Pro Pro Lys Phe Gln Lys  
 275 280 285  
 Gly Ala Ser Leu Leu Gly Lys Met Phe Ser Gln Lys Thr Leu Pro Pro  
 290 295 300  
 Ile Leu Asn  
 305

&lt;210&gt; 43737

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43737

Ile Glu Phe Thr Asn Cys Cys Ser Trp Val Phe Ser Ser Glu Leu Ser  
 1 5 10 15  
 Ala Ser Gln Ser Ser Gly His Ala Ile Tyr Lys Pro Ser Ala Asn Ala  
 20 25 30  
 Gln Lys Leu Asn Gly Tyr Thr Trp Lys Ile Gln Tyr Gly Asp Gly Ser  
 35 40 45  
 Ser Ala Ser Gly Asp Val Tyr Lys Asp Thr Val Thr Val Gly Gly Val  
 50 55 60  
 Thr Ala Gln Ser Gln Ala Val Glu Ala Ala Ser His Ile Ser Ser Gln  
 65 70 75 80  
 Phe Val Gln Asp Lys Asp Asn Asp Gly Pro Phe Ser Pro Leu Gly  
 85 90 95

&lt;210&gt; 43738

&lt;211&gt; 131

&lt;212&gt; PRT



&lt;213&gt; A.fumigatus

&lt;400&gt; 43738

Cys Trp Ser Val Gln Gly Gln Ser Tyr Gln Asn Gln Gly Ser Ser Gln  
 1 5 10 15  
 Ser Tyr Pro Tyr Gly Asn Gln Asn Gln Asn Pro Tyr Gln Asn Pro Glu  
 20 25 30  
 His Gln Gly Lys Pro Ala Lys Gln Asp Lys Leu Ser Gly Leu Leu Gly  
 35 40 45  
 Lys Leu Gln Asp Thr Val Thr Gly Leu Gly Ser Glu Val Ala Gln Arg  
 50 55 60  
 Val Gly Asn Val Leu Asp Pro Gln Gln Ala Tyr Ala Glu His Gly Pro  
 65 70 75 80  
 Asn Lys Pro Gln Ser Glu His Arg Phe Gly Ser Phe Ala Pro Pro Arg  
 85 90 95  
 Gln Ala Asn Asp Ala Lys Trp Tyr Val Asp Gly Cys Ser Tyr Phe Tyr  
 100 105 110  
 Ala Val Ser Lys Ala Leu Glu Ser Ala Arg Glu Ser Ile Trp Ile Leu  
 115 120 125  
 Asp Cys Lys  
 130

&lt;210&gt; 43739

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43739

Thr Gly Ser Val Lys Val Thr Thr Ser Phe Leu Ser Cys Asp Trp Asn  
 1 5 10 15  
 Cys Pro Tyr Pro Leu Gly Glu Cys Met Leu Ser Val Gly Leu Leu Ile  
 20 25 30  
 Thr Ile Gly Thr Phe Ser Thr Val Tyr Lys Ala Glu Asp Leu Leu Tyr  
 35 40 45  
 Asp His Tyr Lys Asn Asp Trp Asp Thr Phe Gln Glu Thr Gln Ser Ser  
 50 55 60  
 Asn Trp Ser Ser Pro Pro Ala Lys Arg Arg Arg Val Glu Glu Ser Val  
 65 70 75 80  
 Thr Lys Arg Arg Lys Pro Arg Tyr Val Ala Leu Lys Lys Ile Tyr Val  
 85 90 95  
 Thr Ser Ser Pro Leu Arg Ile Gln Asn Glu Leu Glu Leu Leu His Asp  
 100 105 110  
 Leu Arg Gly Cys Arg Ser Val Cys Pro Leu Ile Thr Ala Phe Arg His  
 115 120 125  
 Gln Asp Gln Val Val Ala Val Leu Pro Phe Phe Pro His Thr Asp Phe  
 130 135 140  
 Arg Ile Gln Tyr Arg Thr Phe Met Val Ala Asp Met Arg His Tyr Phe  
 145 150 155 160  
 Arg Ser Leu Phe Thr Ala Leu Asn Ser Val His Lys His Asn Ile Leu  
 165 170 175  
 His Arg Asp Ile Lys Pro Thr  
 180

&lt;210&gt; 43740

&lt;211&gt; 117

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (5)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43740

```

Ala Glu Leu Thr Xaa Tyr Pro Ala Pro Phe Ser Pro Ser Ile Gly Arg
1          5          10          15
Asn Ala Thr Gln Pro Lys Ile Ile Ala Pro Ala Ser Thr Phe Lys Phe
          20          25          30
Ile Pro Lys Asp Asp Arg Ile Pro Pro Ser Ala Glu Pro Val Asp Ser
          35          40          45
His Gly Phe Pro Ala Gly Thr His Trp Val Asp Phe Ala Lys Pro Gly
          50          55          60
Thr Ile Ala Val Leu Glu Gln Pro Ala Asn Gln His Cys Ala Val Leu
65          70          75          80
Gly Gly Ile Met Ala Val Arg Met Lys Val Leu Gly Val Arg Gly Val
          85          90          95
Leu Val Asn Gly Arg Val Arg Asp Val Gln Glu Ser Ser Pro Arg Lys
          100          105          110
Trp Gln Asp Gln Arg
          115

```

<210> 43741

<211> 181

<212> PRT

<213> A.fumigatus

<400> 43741

```

Thr Gln Cys Gly Ser Arg Arg Leu Cys Glu Asn Trp Thr Cys Ser Thr
1          5          10          15
Tyr Ile Tyr Glu Asp Gly Asn Arg Leu Ser Lys Ala Asp His Asn Leu
          20          25          30
Ala Arg Pro Leu Ser Thr Lys Val Lys Pro Pro Phe Glu Ser Ser Trp
          35          40          45
Trp Ala Lys Leu Phe Thr Glu Leu Thr Gln Asp Lys Gln Met Ala Glu
          50          55          60
Lys Ser Gly Arg His Gln Asn Ala Asp Asp His Ile Arg Gln Phe Phe
65          70          75          80
Arg Ser Leu Ser Ala Val Gln Glu Ile Arg Ala Ile Ser Gln Asn Ser
          85          90          95
Arg Arg Val Ser Gln Gly Ser Gly His Pro Gly Asp Cys Ser Lys Arg
          100          105          110
Met Ala Ile Leu Leu Trp Lys Phe Arg Gln Thr Leu Pro Asp Glu Val
          115          120          125
Gly Leu Thr Thr Trp Arg Lys Leu Ile Pro Pro Pro Asp Arg Thr Met
          130          135          140
Met Asn Ser Pro Lys Pro Ala Thr Gly Ile Asp Leu Pro Pro Leu Ser
          145          150          155          160
Leu Asp Ser Ile Leu Leu Lys Pro His Pro Pro Asn Val Tyr Gln Asn
          165          170          175
Pro Gln Gly His Asp
          180

```

<210> 43742  
 <211> 155  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (128)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43742  
 Ser Phe Ser Arg Thr Leu Ser Thr Ser Ala Pro Ser Arg Arg Ser Arg  
 1                    5                    10                    15  
 Ser Ala Ser Arg Thr Leu Arg Arg Ser Gly Ser Ala Pro Tyr Ala Pro  
 20                    25                    30  
 Ala Pro Gln Leu Ala Ile Pro Pro Thr Met Val Ala Glu Ala Ala Ala  
 35                    40                    45  
 Pro Val Arg Gly Ser Lys Ser Ser Ser Ser Ser Ser Ser Ser Ser  
 50                    55                    60  
 Arg Leu Ser Ala Leu Arg Ser Ser Ser Arg Trp Ala Ser Ser Ile Arg  
 65                    70                    75                    80  
 Phe Leu Thr Ser Ala Ala Ile Arg Ile Pro Ser Glu Thr Met Leu Ser  
 85                    90                    95  
 Arg Thr Pro Arg Arg Pro Phe Pro Gly Gly Thr Met Pro Pro Asp Ala  
 100                    105                    110  
 Pro Pro Thr Gly Ala Pro Asp Thr Val Leu Pro Gly Ala Leu Ser Xaa  
 115                    120                    125  
 Pro Met Phe Glu Lys Val Val Arg Leu His Tyr Lys Asp Met Val Val  
 130                    135                    140  
 Asp Ala Arg Trp Arg Met Ile Gly Gln Thr Glu  
 145                    150                    155

<210> 43743  
 <211> 88  
 <212> PRT  
 <213> A.fumigatus

<400> 43743  
 Val Arg Ala Val Ser Ser Asn Thr Leu Cys Arg Pro Leu Gln Arg Thr  
 1                    5                    10                    15  
 Arg Arg Leu Thr Asn Ala Val Met Ser Phe Thr Ser Met Phe Tyr Lys  
 20                    25                    30  
 Arg Ser Glu Gln Pro Leu Arg Met Ser Leu Trp Met Ser Gly Asn Gly  
 35                    40                    45  
 Met Ala Thr Met Ile Gly Ala Leu Leu Ser Phe Gly Val Gly His Ser  
 50                    55                    60  
 His Asn Thr Asn Ile His Ser Ser Gln Leu Ile Phe Val Leu Thr Thr  
 65                    70                    75                    80  
 Ala Lys Lys Asp Arg Lys Cys Val  
 85

<210> 43744  
 <211> 116  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43744

```

Ser Gln Ile Ser Val Ser Lys Ala Arg Asp Ile Leu Gly Leu Leu Leu
1           5           10           15
Phe Ser Thr Leu Gly Thr Pro Asp Pro Phe Ser Tyr Asn Gly Ala Asp
           20           25           30
Phe Ala Asn Pro Thr Arg Tyr Val Phe Trp Ala Ile Pro Ala Asn Leu
           35           40           45
Leu Ile Gln Arg Leu Pro Leu Ala Lys Tyr Met Gly Gly Val Ile Ile
           50           55           60
Ile Trp Ala Gly Leu Val Ile Ala His Ile Gly Ala Lys Asn Tyr Ala
65           70           75           80
Gly Ile Leu Val Leu Arg Phe Leu Leu Gly Met Ala Glu Ala Cys Val
           85           90           95
Ser Pro Cys Arg Lys Phe Gln Tyr Ile Val Ser Ser Ile Ala Ala Asp
           100          105          110
Ser Glu Thr Asp
           115

```

&lt;210&gt; 43745

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43745

```

Ala Gly Ile Leu Arg Tyr Pro Ser Phe Thr Pro Leu Val Met Val Phe
1           5           10           15
Ile His Ala Ile Thr Thr Ala Ser Thr Phe Asp Leu Ala Leu Leu Gln
           20           25           30
Asp Thr Val Gln Ser Leu Gln Leu Phe Lys Gly Leu Ser Arg Gly Ser
           35           40           45
Asp Arg Leu Tyr Thr Ile Cys Ala Ala Phe Ser Arg Thr Ala Gln Ile
           50           55           60
Leu Val Asp Ser Glu Glu Thr Leu Glu Gly Leu Thr Gln His Arg Asp
65           70           75           80
Gly Ser Leu Val Met Pro Ala Leu Asp Ser Asn Ile Ala Leu Pro Asn
           85           90           95
Val Asp Trp Pro Glu Asn Val Phe Asp Ser His Met Asn Ser Thr Asp
           100          105          110
Ile Ser Met Phe Leu Asn Asp Phe Ile Gly Thr His Arg Ser Val Met
           115          120          125
Asp Ile Leu Asn Ser Asp Tyr Val Asn Glu Thr
           130          135

```

&lt;210&gt; 43746

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43746

```

Leu Ile Arg Pro Thr Pro Leu Ser Val Ile His Gly Ala Thr His Thr
1           5           10           15
Thr Pro Pro Pro Ala Val Pro Ala Met Lys Ile Met Arg Arg Asn Asp
           20           25           30
Gly Asp Arg Pro Ser Thr Glu Gly Ser Thr Ala Ala Ser Ser Ser Val
           35           40           45
Pro Ser Lys Thr Thr Ser Glu Val Gly Asp Ser Gly Asn Asp Gly Glu

```

## 19757

|                         |   |     |     |    |
|-------------------------|---|-----|-----|----|
| 50                      |   | 55  |     | 60 |
| Arg Gly Ser Ser Ala Gly | Ala Thr Pro Ala Lys Asp Arg Met Ala Leu |     |     |    |
| 65                      | 70                                      | 75  | 80  |    |
| Thr Arg Glu Glu Arg Glu | Ala Lys Tyr Gln Glu Ala Arg Glu Arg Ile |     |     |    |
|                         | 85                                      | 90  | 95  |    |
| Phe Arg Asp Phe Pro Glu | Thr Lys Ser Ser Asp Ile Ser Asp Gln Gly |     |     |    |
|                         | 100                                     | 105 | 110 |    |
| Thr Ser Met Ser Arg Ser | Ser Ser Thr Ser Gly Arg Lys Lys Thr His |     |     |    |
|                         | 115                                     | 120 | 125 |    |
| Arg Gln Lys Thr Pro His | Asp Asp Ser Leu Asp Ala Arg Ser Gln Phe |     |     |    |
|                         | 130                                     | 135 | 140 |    |
| Tyr Ala Ile Met Arg Pro | Gly Leu Asp Tyr Ser Gly                 |     |     |    |
| 145                     | 150                                     | 155 |     |    |

&lt;210&gt; 43747

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (4), (5), (6), (13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43747

|   |     |     |     |  |
|---|-----|-----|-----|--|
| Lys Phe Pro Xaa Xaa Xaa Gly Cys Gly Glu Gly Ile Xaa Ser Arg Met |     |     |     |  |
| 1   | 5   | 10  | 15  |  |
| Ser Pro Asp Glu Gly Met Ala Val Ser Phe Leu Ser Trp Asn Met Leu |     |     |     |  |
|   | 20  | 25  | 30  |  |
| Thr Ser Gln Pro Leu Leu Arg Asn Leu Pro Pro Asp Ser Asn Phe Ala |     |     |     |  |
|   | 35  | 40  | 45  |  |
| Lys Ala Leu Val Leu Gly Ile Ala Leu Ala Ala Asn Val Gly Gly Ala |     |     |     |  |
|   | 50  | 55  | 60  |  |
| Ala Ser Pro Ile Ala Ser Pro Gln Asn Ile Ile Ala Leu Gln Asn Met |     |     |     |  |
| 65  | 70  | 75  | 80  |  |
| Tyr Pro Ser Ile Ser Trp Gly Thr Trp Phe Phe Ile Ser Leu Pro Val |     |     |     |  |
|   | 85  | 90  | 95  |  |
| Cys Ile Ile Ser Ile Leu Leu Ile Trp Leu Leu Leu Leu Ala Thr Phe |     |     |     |  |
|   | 100 | 105 | 110 |  |
| Lys Pro Gly Arg Asp Thr Thr Ile Val Pro Ile Arg Pro Val Lys Asp |     |     |     |  |
|   | 115 | 120 | 125 |  |
| Gln Phe Ser Gly Val Gln Tyr Phe Val Thr Ile Val Thr Leu Ser Thr |     |     |     |  |
|   | 130 | 135 | 140 |  |
| Ile Gly Leu Trp Cys Val Ser His Gln Leu Glu His Val Phe Gly Asp |     |     |     |  |
| 145   | 150 | 155 | 160 |  |
| Met Gly Val Ile Ala Ile Ile Pro Met Val Leu Phe Phe Gly Thr Gly |     |     |     |  |
|   | 165 | 170 | 175 |  |
| Ile Leu Asn Lys Glu Asp Phe Asn Asn Phe Leu Trp Thr Ile Ile Ile |     |     |     |  |
|   | 180 | 185 | 190 |  |
| Leu Ala Ala Gly Gly Leu Cys Leu Gly Lys Ala Val Ile Ser Arg Pro |     |     |     |  |
|   | 195 | 200 | 205 |  |
| Gly Leu Asp Asp His Gly Leu                                     |     |     |     |  |
| 210   | 215 |     |     |  |

&lt;210&gt; 43748

&lt;211&gt; 89

<212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (6), (12)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43748  
 Thr Val Glu Tyr Pro Xaa Arg Arg Val Ser Gln Xaa Pro Arg Asp Ser  
 1 5 10 15  
 Pro Asp Pro Thr Gly His Gly Leu Glu His His Gln Pro Lys Ser Leu  
 20 25 30  
 Gly Asn Arg Ala Val Gln Glu Glu Val Ser Arg Ser Ile Cys Thr Ser  
 35 40 45  
 Gln Trp Phe Ser Gly Gln Glu Thr Cys Glu Asn Tyr Met Ile Pro Asp  
 50 55 60  
 Ser Ile Lys Glu Thr Val Asp Val Ser Phe Asn Leu Arg Ile Ala Val  
 65 70 75 80  
 Ser Ser Asp Asn Gln Lys Leu Glu Arg  
 85

<210> 43749  
 <211> 288  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (10), (30), (48), (57), (68), (75), (110), (119), (277), (283)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43749  
 Ile Arg Arg Cys Pro Asn Arg Pro Glu Xaa Pro Glu Ala Asn Leu Arg  
 1 5 10 15  
 Leu Pro Gly Tyr Leu Leu Arg Tyr Asn Pro Asp Leu Thr Xaa Val Tyr  
 20 25 30  
 Pro Phe Arg Leu Lys Asp Ile Tyr Lys Glu Pro Ala Gln Pro Asp Xaa  
 35 40 45  
 Val Tyr Val Ala Ser Pro Gly Ser Xaa Gly Phe Gln Leu Leu Leu Tyr  
 50 55 60  
 Leu Arg Gln Xaa Arg Lys Pro Pro Val Val Xaa Leu Asn Phe Gln Thr  
 65 70 75 80  
 Asp Leu Ser Ala Tyr Ser Glu Ile Ile Leu Pro Ser Pro Leu Ser Arg  
 85 90 95  
 Trp Ser Val Trp Leu Leu Ala Val Val Gln Gly Phe Leu Xaa Ser Ile  
 100 105 110  
 Pro Ala Val His Thr Ile Xaa Tyr Pro Ser Ser Ser Ile Leu Arg Tyr  
 115 120 125  
 Leu Lys Asp Ala Gly Ala Pro Ala Thr Arg Ala Val Lys Leu Gly Arg  
 130 135 140  
 Gly Val Asp Thr Ile Leu Phe His Pro Ser Arg Arg Asp Glu Ala Phe  
 145 150 155 160  
 Arg Lys Glu Ile Ala Pro Asp Gly Glu Ile Ile Leu Val Cys Val Cys  
 165 170 175  
 Arg Leu Ala Leu Glu Lys Gly Phe Glu Phe Leu Ala Val Ala Ala Ala

## 19759

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 180 |     | 185 |     | 190 |     |     |     |     |     |     |     |     |     |     |
| Lys | Leu | Ala | Glu | Glu | Lys | Leu | Pro | Phe | Lys | Leu | Leu | Ile | Val | Gly | Gly |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Asn | Arg | Asn | Pro | Glu | Val | Glu | Arg | Asn | Ile | His | Arg | Leu | Phe | Asp | Thr |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Val | Arg | Asp | His | Val | Ile | Phe | Thr | Gly | Phe | Leu | Thr | Gly | Glu | Pro | Leu |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Ala | Arg | Ala | Tyr | Ala | Ser | Gly | Asp | Leu | Phe | Leu | His | Cys | Ser | Ile | Thr |
|     |     | 245 |     |     |     |     |     | 250 |     |     |     |     |     | 255 |     |
| Glu | Thr | Phe | Gly | Leu | Val | Val | Leu | Glu | Ala | Met | Ala | Ser | Gly | Val | Arg |
|     | 260 |     |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |
| Ala | Val | Ala | Arg | Xaa | Leu | Arg | Asp | Pro | Pro | Xaa | Trp | Ile | Phe | His | Cys |
|     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |

&lt;210&gt; 43750

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43750

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Leu | Gly | Gly | Ser | Ala | Asn | Glu | Thr | Asp | Val | Ser | Ala | Arg | Ile |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Thr | Ala | Gln | Val | Ala | Leu | Ala | Thr | Arg | Pro | Asp | Phe | Leu | Leu | Ser | Lys |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Pro | Gly | Ile | Gly | Ala | Asp | Glu | Gly | Leu | Met | Ile | Leu | Thr | Asn | Glu | Met |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Leu | Arg | Gly | Ile | Ala | Leu | Ala | Lys | Arg | Ala | His | Cys | Lys | Leu |     |     |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43751

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (45)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43751

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Ile | Tyr | Met | Val | Pro | Ser | Pro | Gly | Ser | Ile | Cys | Ala | Ala | His | Leu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| His | Tyr | His | Thr | Arg | Cys | Phe | Pro | Leu | Cys | Gln | Val | Ser | Gln | Thr | Trp |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Leu | Asn | Ala | Met | Trp | Arg | Leu | Val | Ile | Arg | Arg | Ser | Xaa | Tyr | Asn | Ile |
|     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |     |
| Glu | Lys | Asp | Lys | Phe | Arg | Ala | Val | Thr | Gly | Ile | Gln | Leu | His | Tyr | Thr |
|     | 50  |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |     |
| Gln | Ala | Gly | Gly | Ile | Thr | Gly | His | Val | Met | Leu | Val | Cys | Met | Met | Leu |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |     |
| Met | Tyr | Thr | Ile | Ser | His | His | Arg | Ile | Arg | Gln | Gln | Ser | Phe | Glu | Thr |
|     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |     |
| Phe | Trp | Tyr | Thr | His | His | Leu | Phe | Ile | Pro | Phe | Leu | Leu | Ala | Leu | Asn |
|     |     | 100 |     |     |     | 105 |     |     |     |     | 110 |     |     |     |     |
| Thr | His | Ala | Thr | Gly | Cys | Phe | Val | Arg | Asp | Thr | Pro | Glu | Pro | Thr | Ser |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |

## 19760

Pro Phe Ala Gly Lys Arg Phe Trp Asn His Cys Ile Gly Tyr Gln Gly  
 130 135 140  
 Trp Arg Trp Glu Leu Val Gly Gly Ser Leu Tyr Leu Met Glu Arg Leu  
 145 150 155 160  
 Tyr Arg Glu Ile Arg Ser Arg Arg Ala Thr Val Ile Thr Lys Val Ile  
 165 170 175  
 Arg His Pro Tyr Gly Lys Arg His Leu Arg Asp Cys Ser Ala  
 180 185 190

&lt;210&gt; 43752

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43752

Glu Thr Ala Ile His Asp His Phe Leu Leu Leu Thr Thr Ala Phe  
 1 5 10 15  
 Pro Ser His Phe Ile Ser Ser Ile Met Ala Ala Asn Gly Leu Tyr Asn  
 20 25 30  
 Ile Tyr Arg Leu Ala Ile Pro Val Ala Thr Gly Ala Met Ile Phe Asn  
 35 40 45  
 Ala Ser Ile Tyr Asp Val Arg Gly Gly Thr Arg Ala Val Ile Phe Asp  
 50 55 60  
 Arg Leu Ser Gly Val Gln Glu Lys Val Val Asn Glu Gly Thr His Phe  
 65 70 75 80  
 Leu Ile Pro Trp Leu Gln Lys Ala Ile Ile Tyr Asp Val Arg Thr Lys  
 85 90 95  
 Pro Arg Asn Ile Ser Thr Thr Thr Gly Ser Lys Asp Leu Gln Met Val  
 100 105 110  
 Ser Leu Thr Leu Arg Val Leu His Arg Pro Asp Val Pro Lys Leu Pro  
 115 120 125  
 Val Ile Tyr Gln Val Ser Pro His Cys Ser Lys Ala  
 130 135 140

&lt;210&gt; 43753

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43753

Leu Glu Ser Arg Ala Val Leu Gln Asn Val Pro Ile Ala Tyr Arg Gly  
 1 5 10 15  
 Trp Gly Gln Val Leu Arg Lys Gly Asn Ser Gly Ile Leu Val Cys His  
 20 25 30  
 Pro Asp Phe Leu Asp Thr Asp Val Ser Ser Trp Trp Ser Thr Leu Leu  
 35 40 45  
 Gly Glu Glu Gly Arg Ala Phe Asp Val Arg Arg Phe Phe Val Asn Cys  
 50 55 60  
 Ile Asn Pro Met Gly Cys Pro Tyr Gly Ser Val Ser Pro Leu Asn Ala  
 65 70 75 80  
 Phe Lys Gly Ala His Gly Pro Ala Phe Pro Leu Thr Thr Ile Arg Asp  
 85 90 95  
 His Val Arg

&lt;210&gt; 43754



19761

<211> 102

<212> PRT

<213> A.fumigatus

<400> 43754

```

Leu Leu Pro Ser Tyr Asp Ser Pro Thr Pro Asp Ser Thr Ser Leu Pro
1          5          10          15
Gln Thr Ala Val Ser Pro His Gln Asn Leu Thr Phe Asp Ser Trp Ile
          20          25          30
Pro Ser Thr Asn Leu Ala Thr Val Asp Pro Met Asp Gln Pro Arg Glu
          35          40          45
Phe Leu Asp Trp Arg Gln Leu Phe Ser Phe Thr Asp Pro Asp Gln Pro
          50          55          60
Val Leu Pro Met Ser Met Asp Gly Leu Pro Glu Leu Glu Asp Glu Trp
65          70          75          80
Arg Gln Ile Tyr Trp Gln Glu Thr Pro Met Ser Asp Leu Leu Gln Asp
          85          90          95
Gly Gly Trp Met His Gly
          100

```

<210> 43755

<211> 199

<212> PRT

<213> A.fumigatus

<400> 43755

```

Ile Phe Cys Met Ala Val Phe Ile Gly Pro Phe Ala Ala Pro Phe Val
1          5          10          15
Gly Gly Phe Ile Thr Met Ser Ala Leu Gly Trp Arg Trp Thr Met Tyr
          20          25          30
Ile Ser Ala Ile Met Val Leu Leu Gly Phe Val Leu Val Val Leu Phe
          35          40          45
Leu Asp Glu Thr Tyr Ala Pro Val Ile Leu Val Arg Lys Ala Ala Thr
          50          55          60
Leu Arg Arg Gln Thr His Asn Trp Gly Ile His Ala Lys Gln Asp Glu
65          70          75          80
Val Glu Val Asp Phe His Glu Leu Val Arg Asn Asn Phe Thr Arg Pro
          85          90          95
Leu Lys Met Leu Phe Thr Glu Pro Ile Leu Leu Leu Ile Ser Leu Tyr
          100          105          110
Ile Ser Phe Ile Tyr Gly Leu Ile Tyr Ala Leu Leu Gly Ala Tyr Pro
          115          120          125
Val Val Phe Gln Arg Val Tyr Gly Met Asn Met Gly Glu Gly Gly Leu
          130          135          140
Ala Phe Val Gly Leu Ile Ile Gly Glu Leu Leu Gly Gly Val Phe Ile
145          150          155          160
Leu Phe Leu Gln Gly Ser Tyr Ile Lys Lys Leu Ala Ala Asn Gly Asp
          165          170          175
Val Pro Val Pro Glu Trp Arg Leu Pro Arg Ala Met Ser Ser Gln Arg
          180          185          190
Gly Trp Lys Asp Pro Arg Phe
          195

```

<210> 43756

<211> 115

<212> PRT

19762

<213> A.fumigatus

<220>

<221> UNSURE

<222> (5), (23)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43756

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Tyr | Ala | Ser | Xaa | Tyr | Leu | Thr | Gln | Ser | Tyr | Gly | Leu | Tyr | Ala | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Ala | Met | Ala | Gly | Asn | Xaa | Val | Ile | Arg | Ser | Ile | Leu | Gly | Gly | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Pro | Leu | Val | Gly | Ser | Tyr | Met | Tyr | Ala | Gly | Ile | Gly | Pro | Asn | Trp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Gly | Thr | Leu | Leu | Gly | Leu | Leu | Glu | Val | Ala | Ile | Ile | Pro | Ile | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe | Val | Phe | Tyr | Lys | Tyr | Gly | Tyr | Lys | Ile | Arg | Arg | Lys | Ser | Ala | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Met | Arg | Met | Gln | Met | Asp | Gln | Met | Arg | Leu | Glu | Gly | Lys | Arg | Lys |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Arg | Leu | Val | Gln | Arg | Thr | Glu | Gly | Asn | Ala | Ala | Thr | Glu | Gln | Val | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Val | Glu | Val |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 115 |

<210> 43757

<211> 114

<212> PRT

<213> A.fumigatus

<400> 43757

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Thr | Asn | Ser | Leu | Thr | Phe | Phe | Ile | Phe | Ala | Lys | Tyr | Ile | Asp | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Val | Arg | Trp | Arg | Lys | Leu | Val | Tyr | Phe | Thr | Lys | Glu | Leu | Asp | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Asp | Asn | Gly | Gly | Arg | Leu | Asn | Phe | Ile | Asn | Phe | Glu | Thr | His | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Asp | Leu | Cys | Ile | Asp | Phe | Ile | Arg | Gln | Leu | Lys | Asp | Glu | His | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Leu | Asn | Gly | Pro | Ser | Arg | Asp | Glu | Leu | Cys | Val | Val | Ala | Thr | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Gly | Ala | Tyr | Lys | Tyr | Tyr | Asp | Lys | Leu | Lys | Glu | Thr | Leu | Lys | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Ile | Ile | Arg | Glu | Asp | Glu | Met | Glu | Cys | Leu | Ile | Thr | Gly | Gln | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Thr | Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43758

<211> 141

<212> PRT

<213> A.fumigatus

<400> 43758

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Ser | Leu | Leu | Asp | Asn | Leu | Ile | Leu | Cys | Ile | Ser | Gly | Ala | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

# 19763

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gln | Pro | Pro | Pro | Ala | Pro | Gly | Leu | Asp | Phe | Phe | Ile | Thr | Glu | Ile |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Asn | Glu | Val | Phe | Thr | Tyr | Ser | Glu | Ala | Glu | Pro | Met | Gln | Phe | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Ala | Arg | Pro | Asp | Val | Tyr | Pro | Tyr | Leu | Leu | Val | Asn | Ile | Gly | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Val | Ser | Met | Ile | Lys | Val | Ser | Gly | Pro | Lys | Gln | Phe | Glu | Arg | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Gly | Thr | His | Leu | Gly | Gly | Gly | Thr | Phe | Trp | Gly | Leu | Met | Ser | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Thr | Gly | Thr | Arg | Asn | Phe | Asp | Asp | Met | Leu | Ala | Met | Ala | Asp | Arg |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Asp | Asn | Ser | Gly | Val | Asp | Met | Leu | Val | Gly | Asp | Ile | Tyr | Gly | Met |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Tyr | Arg | Leu | His | Leu | Gly | Thr | Gly | Arg | Ser | Arg | Ala |     |     |     |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |

<210> 43759

<211> 166

<212> PRT

<213> A.fumigatus

<400> 43759

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gly | Ser | Pro | Arg | Thr | Pro | Gln | Asp | His | Leu | Phe | Pro | Pro | Asp | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Gly | Leu | Ser | Ile | Ser | Ala | His | Asn | Asp | Gln | His | Pro | Leu | Gln | Pro |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Phe | Asn | Ser | Ser | Asn | Leu | Pro | Ala | Thr | Pro | Thr | Gly | Pro | Arg | Asp |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Phe | Met | Gln | Ser | Gly | Lys | Arg | Pro | Ile | Leu | Ser | Leu | Ser | Gly | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| His | Ala | Pro | Asp | Val | Asp | Pro | Ser | Leu | Thr | Ser | Arg | Leu | Glu | Gln | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Leu | Val | Gly | Thr | Gly | Glu | Phe | Ser | Gln | Val | Tyr | His | Val | Ala | His |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | His | Glu | Met | Ser | Leu | Thr | Ser | Arg | Phe | Ser | Leu | Pro | Asn | Gly | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Ser | Pro | His | Ser | Leu | Pro | Ala | Arg | Val | Trp | Ala | Val | Lys | Lys | Ser |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Gln | Pro | Tyr | Ala | Gly | Leu | Ile | Asp | Arg | Glu | Arg | Arg | Ile | Arg | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val | Asp | Val | Leu | Lys | Ala | Leu | Thr | Asn | Ser | Asp | His | Val | Ile | Ser | Phe |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | Asp | Ser | Trp | Glu | Asp |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     | 165 |     |     |     |     |     |     |     |     |     |     |

<210> 43760

<211> 179

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (7), (16)

<223> Identity of amino acid sequences at the above locations are unknown.

19764

<400> 43760

```

Pro Asn Ala Tyr Ser Asp Xaa Ser Arg Pro Phe Ala Leu Ser Gly Xaa
1          5          10          15
Val Trp Ser Cys Val Gly Gln Ile Val Val Lys Leu Phe Pro Asn Gln
          20          25          30
Val Arg Lys Val Leu Leu Glu Trp Lys Leu Ser Lys Leu Gly Ser Cys
          35          40          45
Ala Leu Leu Val Leu Ile Trp Ser Thr Tyr Asp Gly Ala Phe Ala Ser
          50          55          60
Asn Ala Phe Ala Glu Ile Pro Ser Asn Asn Met Val Phe Thr Val Phe
65          70          75          80
Ile Leu Val Ala Leu Phe Cys Leu Trp Ile Thr Ile Ala Phe Val Ile
          85          90          95
Ser Arg Val Trp Leu Ser Arg Glu Asp Thr Ile Ala Val Ser Tyr Leu
          100          105          110
Val Ser Thr Lys Thr Pro Ala Met Gly Val Pro Leu Thr Thr Ile Met
          115          120          125
Tyr Lys Gly Leu Ser Ala Ala Gln Gln Ser Arg Thr Arg Leu Pro Met
          130          135          140
Val Ile Phe His Ala Ile Gln Ile Ala Gly Ser Ser Leu Leu Thr Ile
145          150          155          160
Pro Leu Arg Lys Trp His Ala Gln Arg Asn Ala Glu Glu Thr Gly Asp
          165          170          175
Gly Thr Val

```

<210> 43761

<211> 122

<212> PRT

<213> A.fumigatus

<400> 43761

```

Arg Pro Pro Ala Pro Pro His Arg Pro Pro Asp Pro Ala Val Ala Gln
1          5          10          15
Leu His Ser Phe Ser Ser Gly Pro Arg Gln Ser Ser Tyr Ser Cys Arg
          20          25          30
His Pro Ser Tyr Pro Asp Ala Trp Pro Thr Arg Leu Ala Pro Pro Asp
          35          40          45
Ser Ala Cys Ala Pro Thr Pro Ser Ser Phe Leu Asp Leu Ile Pro Arg
          50          55          60
Lys Ala Phe Thr Glu Gly Met Ala Tyr Pro Pro Pro Phe Pro Phe Ala
65          70          75          80
Ser Gly Gly Asn Ser Gln Asn Ser Arg Ser Ser Pro Pro Leu Ser Pro
          85          90          95
Leu Phe Val Leu Arg Val Phe Phe Phe Ser Pro Arg Ile Pro Gln Tyr
          100          105          110
Leu Pro Lys Phe Val Ser Ala Ser Ser Phe
          115          120

```

<210> 43762

<211> 129

<212> PRT

<213> A.fumigatus

<400> 43762

Thr Pro Ser Glu Glu Leu Asp Pro Glu Thr Lys Lys Glu Leu Glu Arg

## 19765

```

1           5           10           15
Lys Arg Asn Leu Glu Glu Arg Asp Glu Leu Ala Lys Arg Leu Asp Lys
          20           25           30
Lys Asp Asp Gly Lys Ser Lys Lys Ile Val Glu Asp Arg Thr Arg Thr
          35           40           45
Ser Glu Val Ala Arg Arg Arg Asp Leu Ala Asp Asp Ala Ala Ala Arg
          50           55           60
Ala Ala Val Met His Asp Leu Arg Leu Arg Ser Arg Gln Glu Tyr Leu
65           70           75           80
Lys Lys Arg Glu Ala Glu Arg Leu Ala Leu Leu Arg Gln Gln Val Ala
          85           90           95
Glu Glu Thr Ala Glu Ile Arg Glu Asn Pro Asn Leu Thr Arg Arg Glu
          100          105          110
Lys Glu Glu Tyr Ala Arg Asn Arg Glu Val Leu Arg Ile Ala Glu Glu
          115          120          125
Arg

```

&lt;210&gt; 43763

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (113)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43763

```

Arg Ile Asp Asp His Arg Asp Gly Tyr Met Met Pro Glu Asp Tyr Ile
1           5           10           15
Thr Glu Lys Gly Lys Ile Asp Arg Lys Lys Lys Glu Glu Ala Leu Tyr
          20           25           30
Lys Arg Tyr Val Asp Arg Asp Glu Arg Gly Gln Glu Arg Phe Ile Thr
          35           40           45
Glu His Glu Glu Trp Glu Met Glu Gln Thr Ala Lys Ala Lys Ala Gln
          50           55           60
Ile Lys Arg Ala Glu Phe Val Asp Glu Gly Asp Tyr Glu Tyr Val Phe
65           70           75           80
Asp Asp Ser Gln Lys Ile Asn Phe Ile Met Asp Thr Lys Leu Glu Gly
          85           90           95
Asn Arg Lys Pro Leu Thr Gln Glu Arg Arg Pro Pro Ser Gly Glu Phe
          100          105          110
Xaa Leu Arg Gly Arg Asp Gly Arg Ser Thr Phe Gly
          115          120

```

&lt;210&gt; 43764

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43764

```

Lys Leu Ser Pro Pro Thr Ala Gln Val Ile Ile Thr Ser Ser Ile Ala
1           5           10           15
Gly Phe Ile Arg Gln Val Pro Phe Ser Phe Ala Tyr Ser Leu Ser Lys
          20           25           30

```

## 19766

```

Ser Ala Thr Asn His Leu Val Lys Met Leu Ser Thr Thr Leu Ser Ser
      35              40              45
Tyr Asp Ile Arg Val Asn Gly Ile Ala Pro Gly Leu Tyr His Ser Glu
      50              55              60
Met Ser Ala Ser Ala Phe Lys Gly Gly Asp Arg Gly Ile Ser Asp Gly
65              70              75              80
Ser Phe Pro Arg Glu Arg Ile Pro Leu Thr Arg Gly Gly Ser Glu Glu
      85              90              95
Asp Ile Ala Gly Leu Ile Leu Trp Leu Ala Ser Ala Ser Gly Gly Tyr
      100             105             110
Met Asn Gly Ser Ile Ile Val Thr Asp Gly Gly Arg Thr Ala Val His
      115             120             125
Pro Ala Ser Tyr
      130

```

&lt;210&gt; 43765

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (141)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43765

```

Thr Asp Gln Val Asn Ala Leu Gln Asp Leu Gly Val Ala Val Ser Thr
1              5              10              15
Ile Asn Ser Thr Thr Pro Leu Ala Glu Arg Arg Leu Ile Ile Asp Asp
      20              25              30
Leu Leu Ser Gly His Pro Arg Thr Arg Leu Leu Tyr Val Thr Pro Glu
      35              40              45
Leu Cys Gln Thr Val Ala Phe Arg Arg Thr Leu Gln Thr Met His Ser
      50              55              60
Gln Gly Glu Leu Ile Arg Ile Ala Ile Asp Glu Ala His Cys Ile Ser
65              70              75              80
Glu Trp Gly His Asp Phe Arg Pro Ala Tyr Lys Gln Leu Ser Trp Phe
      85              90              95
Arg Cys His Leu Asn Gln Pro Pro Val Pro Ile Ser Ala Phe Tyr Gly
      100             105             110
His Ser Asp Pro Thr Cys Ala Arg Arg Tyr His Arg Pro Pro Trp Ile
      115             120             125
Arg Ser Cys Leu Leu Ala Asp Glu Ala Gly Arg Phe Xaa Asp Asn
      130             135             140

```

&lt;210&gt; 43766

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43766

```

Glu Phe Gly Ala Lys Ile Ile Val Gly Gly Arg Lys Ile Ile Asp Asp
1              5              10              15
Tyr Asn Val Gln Ala Ala Arg Glu Arg Gly Asp Val Glu Gly Glu Leu
      20              25              30
Ala Val Pro Glu Asp Lys Leu Pro Pro Pro Gly Glu Pro Tyr Asn Lys

```

## 19767

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Asn Gln Tyr Val Ala Trp His Gly Ala Ser Ser Val Tyr His Thr Asn |     |     |
| 50  | 55  | 60  |
| Ala Pro Ser Leu Pro Leu Pro Thr Gly Lys Ala Ile Asp Ser Lys Lys |     |     |
| 65  | 70  | 75  |
| Arg Lys Val Thr Val Thr Gly Asp Asn Trp Met Leu Glu His Ala Arg |     |     |
| 85  | 90  | 95  |
| Glu Ala Arg Tyr Val Leu Ala Pro Leu Arg Leu Ser Leu Leu Asp Gly |     |     |
| 100   | 105 | 110 |

&lt;210&gt; 43767

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43767

|   |     |     |
|---|-----|-----|
| Ala Cys Pro Gly Gly Gln Val Cys Pro Arg Thr Ser Ser Ser Leu Ser |     |     |
| 1   | 5   | 10  |
| Val Arg Arg Met Thr Asn Ala Phe Thr Ser Ser Phe Asn Ser Leu Ile |     |     |
| 20  | 25  | 30  |
| Leu Asn Ala Arg Arg Ala Asn Leu Glu Gly Val Tyr Asp Ile His Thr |     |     |
| 35  | 40  | 45  |
| Asn Ala Ile His Tyr Pro Lys Ile Met Gln Pro Ser His Ala Arg Trp |     |     |
| 50  | 55  | 60  |
| Glu Arg Val Pro Pro Pro Asp Pro Arg Ala Thr Ala Lys Leu Ala Lys |     |     |
| 65  | 70  | 75  |
| Gly Leu Ser Thr Leu Ser Leu Thr Asn Gly Thr Asp Glu Gly Glu Ala |     |     |
| 85  | 90  | 95  |
| Glu Pro Pro Ala Asp His Val Phe Thr Thr Gly Leu Glu Gly Pro Arg |     |     |
| 100   | 105 | 110 |
| Gln   |     |     |

&lt;210&gt; 43768

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (168)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43768

|   |    |    |
|---|----|----|
| Asn His Arg Arg His Thr His Arg Pro Ser Asn Asp Gln Glu Thr Ile |    |    |
| 1   | 5  | 10 |
| Arg Leu Thr Thr Pro Ser Arg Trp Leu Ile Lys Ala Lys Thr Pro Gln |    |    |
| 20  | 25 | 30 |
| Val Leu Ala Met Leu Ala Val Phe Leu Val Gly Pro Gly Leu Ile Gly |    |    |
| 35  | 40 | 45 |
| Gly Glu Val Leu Asp Leu Leu Lys Glu Lys Asn Tyr Glu Ile Thr     |    |    |
| 50  | 55 | 60 |
| Thr Leu Val Arg Arg Asp Ala Ala Arg Pro Ala Phe His Glu Leu Gly |    |    |
| 65  | 70 | 75 |
| Val Gln Thr Ile Leu Gly Ser Leu Ser Asp Lys Asp Val Ile Val Gln |    |    |
| 85  | 90 | 95 |

## 19768

Gln Thr Ala Ala Ser Asp Ile Val Ile His Ser Ala Thr Ala Asp Asp  
                   100                  105                  110  
 Leu Pro Ser Val Gln Ala Ile Leu Glu Gly Val Arg Gln Arg Thr Gln  
                   115                  120                  125  
 Arg Gly Gln Arg Thr Ile Tyr Ile His Thr Ser Gly Ala Ser Leu Ile  
                   130                  135                  140  
 Gly Asp Asn Ala Glu Gly Ser Tyr Arg Ser Asp Cys Val Phe Asp Asp  
 145                  150                  155                  160  
 Glu Thr Pro Ser Ser Ile Asp Xaa  
                   165

&lt;210&gt; 43769

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43769

Leu Arg Leu Ser Val Ile Asn Ser Ser Lys Thr Ala Tyr Ala Ala Phe  
 1                  5                  10                  15  
 Val Phe Asp Gly Ala Ser Phe Phe Thr Thr Tyr Ser Phe Ser His Asp  
                   20                  25                  30  
 Gly Gln Ser Glu Asn Val Trp Ser Asp Arg Phe Cys Cys Gln Val Tyr  
                   35                  40                  45  
 Leu Lys Val Arg Val Ala Gln Ser Arg Ala Leu Cys Asp Glu Thr Asp  
                   50                  55                  60

&lt;210&gt; 43770

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (172)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43770

Phe Thr Arg Tyr Leu Arg Pro Pro Val Arg Glu Tyr Ala Asn Val Leu  
 1                  5                  10                  15  
 Val Thr Ala Asn Met Ser Gln Val Gln Ser Pro Leu Lys Ser Pro Ile  
                   20                  25                  30  
 Lys Ser Pro Ser Thr Pro Ala Val Pro Ala Ser Ser Thr Arg Ser Ser  
                   35                  40                  45  
 Ile Ser Gly Pro Ser Arg Pro Ser Ala Val Lys Ala Arg Pro Pro Ser  
                   50                  55                  60  
 Gly Pro Lys Thr Ser Met Gly Pro Pro Pro Pro Ser Val Ala Ala  
 65                  70                  75                  80  
 Arg Gln Ser Arg Ser Ser Ile Ser Gly Pro Ala Ser Lys Ala Ala Arg  
                   85                  90                  95  
 Pro Ser Leu Gln Ser Glu Pro Thr Thr Ser Ser Gly Gln Leu Lys Arg  
                   100                  105                  110  
 Pro Ala Leu Arg Pro Thr Ala Pro Asn Lys Ser Ser Glu Glu Thr Glu  
                   115                  120                  125  
 Ser His Thr Ser Ala Tyr Ser Gly Asp Pro Glu Ile Asp Pro Arg Asp  
                   130                  135                  140  
 Ala Glu Pro Asp Met Asp Gly Asn Glu Ala Pro Thr Arg Lys Val Ser



| Year | Country   | Population (millions) | GDP (billion USD) | Life expectancy (years) | Healthcare expenditure (billion USD) | Healthcare expenditure per capita (USD) |
|------|-----------|-----------------------|-------------------|-------------------------|--------------------------------------|---|
| 1990 | USA       | 240                   | 5,000             | 75                      | 100                                  | 417                                     |
| 1995 | USA       | 250                   | 6,000             | 76                      | 120                                  | 480                                     |
| 2000 | USA       | 260                   | 7,000             | 77                      | 140                                  | 538                                     |
| 2005 | USA       | 270                   | 8,000             | 78                      | 160                                  | 593                                     |
| 2010 | USA       | 280                   | 9,000             | 79                      | 180                                  | 643                                     |
| 2015 | USA       | 290                   | 10,000            | 80                      | 200                                  | 689                                     |
| 2020 | USA       | 300                   | 11,000            | 81                      | 220                                  | 733                                     |
| 1990 | Japan     | 120                   | 3,000             | 78                      | 50                                   | 417                                     |
| 1995 | Japan     | 125                   | 3,500             | 79                      | 60                                   | 480                                     |
| 2000 | Japan     | 128                   | 4,000             | 80                      | 70                                   | 538                                     |
| 2005 | Japan     | 130                   | 4,500             | 81                      | 80                                   | 593                                     |
| 2010 | Japan     | 132                   | 5,000             | 82                      | 90                                   | 643                                     |
| 2015 | Japan     | 135                   | 5,500             | 83                      | 100                                  | 689                                     |
| 2020 | Japan     | 138                   | 6,000             | 84                      | 110                                  | 733                                     |
| 1990 | Germany   | 80                    | 2,000             | 77                      | 40                                   | 417                                     |
| 1995 | Germany   | 82                    | 2,200             | 78                      | 45                                   | 480                                     |
| 2000 | Germany   | 83                    | 2,400             | 79                      | 50                                   | 538                                     |
| 2005 | Germany   | 84                    | 2,600             | 80                      | 55                                   | 593                                     |
| 2010 | Germany   | 85                    | 2,800             | 81                      | 60                                   | 643                                     |
| 2015 | Germany   | 86                    | 3,000             | 82                      | 65                                   | 689                                     |
| 2020 | Germany   | 87                    | 3,200             | 83                      | 70                                   | 733                                     |
| 1990 | France    | 60                    | 1,500             | 77                      | 30                                   | 417                                     |
| 1995 | France    | 62                    | 1,600             | 78                      | 35                                   | 480                                     |
| 2000 | France    | 63                    | 1,700             | 79                      | 40                                   | 538                                     |
| 2005 | France    | 64                    | 1,800             | 80                      | 45                                   | 593                                     |
| 2010 | France    | 65                    | 1,900             | 81                      | 50                                   | 643                                     |
| 2015 | France    | 66                    | 2,000             | 82                      | 55                                   | 689                                     |
| 2020 | France    | 67                    | 2,100             | 83                      | 60                                   | 733                                     |
| 1990 | UK        | 55                    | 1,000             | 76                      | 25                                   | 417                                     |
| 1995 | UK        | 56                    | 1,100             | 77                      | 30                                   | 480                                     |
| 2000 | UK        | 57                    | 1,200             | 78                      | 35                                   | 538                                     |
| 2005 | UK        | 58                    | 1,300             | 79                      | 40                                   | 593                                     |
| 2010 | UK        | 59                    | 1,400             | 80                      | 45                                   | 643                                     |
| 2015 | UK        | 60                    | 1,500             | 81                      | 50                                   | 689                                     |
| 2020 | UK        | 61                    | 1,600             | 82                      | 55                                   | 733                                     |
| 1990 | Canada    | 30                    | 500               | 78                      | 15                                   | 417                                     |
| 1995 | Canada    | 31                    | 550               | 79                      | 18                                   | 480                                     |
| 2000 | Canada    | 32                    | 600               | 80                      | 20                                   | 538                                     |
| 2005 | Canada    | 33                    | 650               | 81                      | 22                                   | 593                                     |
| 2010 | Canada    | 34                    | 700               | 82                      | 24                                   | 643                                     |
| 2015 | Canada    | 35                    | 750               | 83                      | 26                                   | 689                                     |
| 2020 | Canada    | 36                    | 800               | 84                      | 28                                   | 733                                     |
| 1990 | Australia | 18                    | 300               | 79                      | 8                                    | 417                                     |
| 1995 | Australia | 19                    | 330               | 80                      | 10                                   | 480                                     |
| 2000 | Australia | 20                    | 360               | 81                      | 12                                   | 538                                     |
| 2005 | Australia | 21                    | 390               | 82                      | 14                                   | 593                                     |
| 2010 | Australia | 22                    | 420               | 83                      | 16                                   | 643                                     |
| 2015 | Australia | 23                    | 450               | 84                      | 18                                   | 689                                     |
| 2020 | Australia | 24                    | 480               | 85                      | 20                                   | 733                                     |

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<210> 43771
<211> 118
<212> PRT
<213> A.fumigatus
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<210> 43772
<211> 158
<212> PRT
<213> A.fumigatus
```

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 43772 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Lys         | Ser | Gly | Lys | Leu | Met | Thr | Pro | Asn | Leu | Gly | Asp | Ala | Arg | Ala | Tyr |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Met         | Tyr | Ser | Leu | Leu | Asn | Gln | Pro | Ser | Ser | Gln | Asn | Asn | Gly | Thr | His |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Ala         | Gly | Lys | Phe | Asp | Val | Ile | Asp | Leu | Asp | Pro | Tyr | Gly | Thr | Ala | Ala |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Pro         | Phe | Met | Asp | Ala | Ala | Val | Gln | Gly | Val | Lys | Asp | Gly | Gly | Leu | Leu |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Cys         | Val | Thr | Cys | Thr | Asp | Ala | Gly | Val | Trp | Ala | Ser | Asn | Gly | Tyr | Pro |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Glu         | Lys | Ala | Tyr | Ala | Leu | Tyr | Gly | Gly | Val | Pro | Ile | Lys | Gly | Ser | His |  |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Ser         | His | Glu | Gly | Gly | Leu | Arg | Leu | Ile | Leu | His | Gly | Leu | Ala | Thr | Ser |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Ala         | Ala | Lys | Tyr | Gly | Leu | Ala | Ile | Glu | Pro | Leu | Leu | Ser | Leu | Ser | Ile |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Asp         | Phe | Thr | Ala | Arg | Val | Phe | Val | Arg | Val | His | Arg | Ser | Pro | Ala | Glu |  |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Val         | Lys | Phe | Thr | Ser | Gly | Asn | Thr | Met | Leu | Val | Phe | Asn | Cys |     |     |  |

## 19770

145

150

155

&lt;210&gt; 43773

&lt;211&gt; 238

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43773

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Ser | Arg | Glu | Glu | Tyr | Cys | Cys | Gly | Val | Ile | Leu | Leu | Asp | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Asp | Trp | Pro | Gly | Val | Ile | Arg | Ala | Ala | Gly | Asp | Phe | Ala | Val | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Gly | Arg | Val | Thr | Gly | Thr | Asn | Tyr | Thr | Thr | Gly | Leu | Ile | Asn | Gly |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Thr | Leu | His | Asp | Gln | Ser | Ser | Val | Arg | Gly | Asn | Arg | Gly | Val | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Ala | Gly | Thr | Ile | Gly | Arg | Ser | Arg | Leu | Ile | Asp | Ser | Leu | Ala | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg | Gly | Lys | Ile | Asp | Val | Ser | Gln | Thr | Lys | Gly | Lys | Trp | Glu | Ala | Phe |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Thr | Glu | Val | Val | Ser | Asn | Pro | Leu | Glu | Gly | Ile | Pro | Asn | Ala | Val |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Ile | Ser | Gly | Ser | Asp | Lys | Arg | Gly | Ala | Ile | Tyr | Gly | Leu | Tyr | Asp |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Ile | Ser | Glu | Gln | Ile | Gly | Val | Ser | Pro | Trp | Tyr | Trp | Phe | Ala | Asp | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Pro | Ala | Gln | His | Lys | Glu | Val | Tyr | Ala | Leu | Lys | Lys | Lys | Lys | Ile |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gln | Gly | Pro | Pro | Ser | Val | Lys | Tyr | Arg | Gly | Ile | Phe | Ile | Asn | Asp | Glu |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gln | Pro | Ala | Leu | Thr | Asn | Trp | Ile | Asn | Glu | Asn | Tyr | Pro | Pro | Ala | Arg |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Tyr | Gly | Pro | Gly | Phe | Asn | Ala | Asn | Phe | Tyr | Ser | Arg | Val | Phe | Glu | Tyr |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | Leu | Arg | Leu | Arg | Ala | Asn | Tyr | Leu | Trp | Pro | Ala | Met | Trp | His | Asn |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ala | Phe | Tyr | Pro | Asp | Asp | Thr | Gly | Pro | Ser | Pro | Arg | Gly | Gln |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     |

&lt;210&gt; 43774

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43774

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Gly | Gly | Ala | Tyr | Met | Ile | His | Ile | Thr | Ala | Glu | Leu | Gly | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Ala | Pro | Val | Cys | Leu | Phe | Pro | Ser | Leu | Asp | Val | Glu | Leu | Ala | Val |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Ala | Ala | Met | Phe | Ala | Ser | Phe | Ile | Ala | Ser | Gly | Gln | Thr | Cys | Val |
|     | 35  |     |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Thr | Gly | Ser | Arg | Leu | Leu | Val | His | Ala | Asp | Leu | Tyr | Asp | Arg | Phe | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Leu | Leu | Glu | Lys | Arg | Val | Arg | Ala | Leu | Arg | Val | Gly | Asp | Pro | Met |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Glu | Arg | Thr | Gln | Ile | Gly | Ser | Val | Ile | Ser | Arg | Ala | Ala | Val | Glu |

## 19771

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Arg | Cys | Ser | Ala | Phe | Val | Leu | Arg | Ala | Val | Gln | Glu | Gly | Gly | Arg | Val |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |  |  |
| Leu | Cys | Gly | Gly | Asn | Pro | Thr | Asn | Ser | Asn | Gly | Lys | Gly | Phe | Phe | Phe |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Glu | Pro | Thr | Ile | Ile | Glu | Thr | His | Ala | Asp | Ser | Asp | Leu | Ala | Thr | Asn |  |  |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Glu | Val | Phe | Gly | Pro | Val | Ile | Ala | Leu | Val | Arg | Cys | Glu | Ser | Glu | Glu |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Glu | Ile | Ile | Arg | Ile | Ala | Asn | Ser | Thr | Ser | Tyr | Ala | Leu | Gly | Ala | Ser |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Val | Trp | Thr | Asn | Asp | Phe |     |     |     |     |     |     |     |     |     |     |  |  |
|     |     |     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 43775

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (8), (14), (25), (64), (241), (243), (244), (247)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43775

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Ser | Arg | Trp | Arg | Pro | Trp | Lys | Xaa | Ile | Pro | Asn | Pro | Gln | Xaa | Arg | Ala |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Gly | Pro | Ala | Ser | Leu | Asp | Thr | Val | Xaa | Ser | Asp | Leu | Ser | Gly | Ile | Leu |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Pro | Thr | Gly | Ser | Ser | Ser | Leu | Ala | Ser | Gly | Val | Ala | Thr | Thr | Asp | Ser |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |  |  |
| Ser | Asn | Ala | Asp | Gly | Thr | Val | Thr | His | Ser | Thr | Val | Val | Ile | Pro | Xaa |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Ser | Thr | Gly | Asn | Asn | Ser | Ser | Pro | Glu | Ala | Ser | Pro | Ser | Pro | Thr | Pro |  |  |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Ser | Pro | Ser | Gly | Val | Leu | Asp | Pro | Leu | Thr | Ser | Ala | Val | Thr | Asp | Leu |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Leu | Pro | Gly | Ser | Ala | Ser | Ser | Ser | Ala | Val | Thr | Asn | Gly | Ser | Ser | Gly |  |  |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     | 110 |     |     |     |  |  |
| Ala | Glu | Thr | Ser | Ala | Ser | Thr | Asp | Leu | Gly | Gln | Ser | Thr | Val | Pro | Val |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Ser | Val | Pro | Ala | Val | Thr | Pro | Ser | Ala | Thr | Ser | Ser | Ser | Gly | Leu | Gly |  |  |
|     |     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |  |  |
| Gly | Ile | Leu | Gly | Pro | Ile | Leu | Ser | Ser | Ala | Gly | Ser | Thr | Gly | Val | Ile |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Pro | Thr | Ala | Ser | Thr | His | Thr | Ser | Ser | Phe | Val | Gly | Val | Pro | Thr | Gly |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Leu | Thr | Ser | Ile | Leu | Ile | Pro | Gly | Gly | Ser | Ser | Gly | Ser | Glu | Ser | Pro |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Thr | Ser | Tyr | Thr | Gln | Ile | Ser | Pro | Ser | Val | Pro | Thr | Thr | Ala | Pro | Ser |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Val | Thr | Ser | Thr | Ala | Val | Ile | Pro | Gly | Ser | Ser | Asp | Thr | Ala | Ile | Gly |  |  |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Ser | Ser | Ile | Ala | Val | Thr | Gly | Ser | Thr | Gly | Val | Ser | Ser | Ser | Pro | Leu |  |  |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Xaa | Phe | Xaa | Xaa | Arg | Asp | Xaa | Thr | Arg | Ala | Leu | Asn | Arg |     |     |     |  |  |

## 19772

245

250

<210> 43776  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 43776  
 Ser Gly Arg Ile Cys Glu Ile Ala Arg Arg Arg Gly Met Thr Ile His  
 1 5 10 15  
 Gly Ala Ile Val Val Ser Arg Gln Val Glu Phe Tyr Lys Met Lys Arg  
 20 25 30  
 Asp Gly Ser Phe Glu Cys Met Thr Trp Leu Ala Gln Glu Lys Lys Arg  
 35 40 45  
 Leu His Ile Leu Arg Asp Met Arg Thr Ile Thr Ser His Leu Met Gln  
 50 55 60  
 Ile Asn Tyr Glu Val Arg Leu Arg Asp  
 65 70

<210> 43777  
 <211> 106  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (97), (99), (103)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43777  
 Ser Pro Thr Lys Arg Ile Arg Val Leu Leu Ala His Cys Phe Ala Arg  
 1 5 10 15  
 Ala Ser Ser Phe Lys Ser Pro Lys Leu Pro Lys Leu Lys Thr Thr Asn  
 20 25 30  
 Arg Tyr Ser Pro Leu Ile His Thr Met Ser Pro Thr Leu Pro Pro Glu  
 35 40 45  
 Val Val Ser Asn Ile Leu Ser His Val Thr Pro Leu Trp His Trp Arg  
 50 55 60  
 Arg Arg Ala Met Trp Lys Asn Asn Cys Glu Arg Ile Thr Ala Glu Asn  
 65 70 75 80  
 Asp Val Arg Trp Phe Leu Arg Ile Arg Gly Ala Cys Arg Ala Ser Phe  
 85 90 95  
 Xaa Thr Xaa Ala Ala Gly Xaa Asn Ser Lys  
 100 105

<210> 43778  
 <211> 144  
 <212> PRT  
 <213> A.fumigatus

<400> 43778  
 Gln Thr Pro Leu Asp Ala Phe Val Ser Pro Ser Ser Asn Tyr Val Ser  
 1 5 10 15  
 Asp Gly Phe Thr Asp Leu Phe Pro Val Ser Ser Ser Leu Asp Ser Ser  
 20 25 30  
 Leu Lys Lys Asn Thr Ala Phe Ile Lys Arg Leu Arg Thr Gly Ile Asn

# 19773

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Ala Ser Val Leu Gln Thr Phe Leu Thr Asp Ile Arg Thr Leu Ser Leu |     |     |
| 50  | 55  | 60  |
| His Lys Tyr Leu Ser Glu Ile Ile Ser Ala Cys Tyr Glu Gly Leu Cys |     |     |
| 65  | 70  | 75  |
| Lys Leu Lys Ser Pro Gly Glu Ile Ala Ala Gly Val Glu Val Thr Ser |     |     |
| 85  | 90  | 95  |
| Ala Leu His Gln Arg Phe Gly Pro Asp Glu Phe Thr Arg Gln Ile Gly |     |     |
| 100   | 105 | 110 |
| Trp Leu Leu Gly Arg Gly Leu Ser Thr Pro Asp Lys Ser Gln Leu Arg |     |     |
| 115   | 120 | 125 |
| Thr Leu Ser Gln Glu Phe Ser Thr Arg Arg Arg Gln Asp Arg Cys Lys |     |     |
| 130   | 135 | 140 |

<210> 43779

<211> 179

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (91)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43779

|   |     |     |
|---|-----|-----|
| Arg Leu Asp Glu Arg Met Gln Ser Glu Gly Leu Tyr Asp Cys Pro Tyr |     |     |
| 1   | 5   | 10  |
| Ser Ser Tyr Ala Val Glu Ser Ile Arg Tyr Leu Val Leu Phe Val Leu |     |     |
| 20  | 25  | 30  |
| Phe Val Thr Cys Leu His Tyr Ser Tyr Tyr Ala Leu Ser Gly Leu Phe |     |     |
| 35  | 40  | 45  |
| Leu Gly Leu Leu Trp His Leu Leu Ala Phe Asn Val His Asp Thr Gly |     |     |
| 50  | 55  | 60  |
| His Leu Ser Ile Thr His Gly Phe His Thr Asp Ser Cys Ile Gly Ile |     |     |
| 65  | 70  | 75  |
| Phe Ile Ala Asp Phe Leu Gly Gly Leu Ser Xaa Gly Trp Trp Lys Arg |     |     |
| 85  | 90  | 95  |
| Asn His Asn Val His His Ile Val Thr Asn Ser Pro Glu His Asp Pro |     |     |
| 100   | 105 | 110 |
| Asp Ile Gln His Met Pro Phe Phe Ala Ile Ser Ser Arg Phe Phe Gly |     |     |
| 115   | 120 | 125 |
| Ser Leu Arg Ser Thr Tyr Tyr Asp Arg Asp Met Lys Phe Asp Thr Ala |     |     |
| 130   | 135 | 140 |
| Ala Arg Phe Phe Ile Lys Tyr Gln His Tyr Leu Tyr Tyr Pro Ile Leu |     |     |
| 145   | 150 | 155 |
| Leu Phe Gly Arg Phe Asn Leu Tyr Arg Leu Ala Trp Ala Tyr Leu Leu |     |     |
| 165   | 170 | 175 |
| Asp Thr Ala   |     |     |

<210> 43780

<211> 88

<212> PRT

<213> A.fumigatus

<400> 43780

## 19774

Ala Ile Ser Val Phe Ala Thr Thr Val Pro Pro Gly Cys Pro His Ser  
 1 5 10 15  
 Gln Leu Ala Leu Asp Thr Asn Asn Thr Ser Gln Pro Val Gln Thr Trp  
 20 25 30  
 Arg Arg Leu Tyr Glu Ser Ser Asn Ser Asn Gly His Pro Gly Gln Asn  
 35 40 45  
 Ile Phe Phe Tyr Leu Asn His Pro Ile Arg Phe Val Ser Leu Val Gly  
 50 55 60  
 Val Ile Val Ala Arg Thr Asp Val Phe Lys Arg Thr Ile Leu Thr Leu  
 65 70 75 80  
 Asp Tyr Ile Ile Gly Glu Thr Ile  
 85

&lt;210&gt; 43781

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43781

Ser Ser Leu Cys Glu Thr Ser Gln Phe His Asn Ala Ala Ser Thr Gly  
 1 5 10 15  
 Ile Tyr Glu Thr Phe Phe Leu Cys Glu Met Gly Tyr Leu Phe Asp Met  
 20 25 30  
 Leu Glu Lys Ala Asn Gly Gln Asn Cys Gln Ala Thr Asn Phe Leu Lys  
 35 40 45  
 Thr Phe Ser Ser Tyr Arg Glu Ala Ser Asn Leu Gly Leu Leu Glu Glu  
 50 55 60  
 Asn Leu Thr Thr Lys Ser Leu Ser Ser Ala Ile Gln Ser Val Asn Arg  
 65 70 75 80  
 Phe Phe Leu Asn Gln Ile Ala His Asp Phe Arg Met Ile Val Pro Ser  
 85 90 95  
 Ser Asp Asp Leu Asp His Arg Leu Ser Thr Ile Ala Ser Glu Ser Ile  
 100 105 110  
 Arg Cys Met Phe Cys Gln Asn Glu Ile Val Arg Pro Gly Asn Ser Leu  
 115 120 125  
 Ala Asn Glu Leu Ile Tyr Pro Thr Ile Asp Ile Lys Gln Ala Arg Arg  
 130 135 140  
 Asn Pro Ala Phe Arg Phe Ser Ser Ile Leu Arg Ala Ser Ile Glu Arg  
 145 150 155 160  
 Glu Thr Gln Asn Arg Gly Trp Cys Asn Tyr Cys Arg Arg Tyr Gln Gln  
 165 170 175  
 Val Thr Ile Arg Lys Ser Ile His Arg Met Pro Leu Val Leu Ile Leu  
 180 185 190  
 Asn Ala Ala Leu Ser Asn Ala Ile Cys Arg Arg Leu Trp Ser Ile Pro  
 195 200 205  
 Gly Trp Leu Pro Glu Glu Val Gly Ile Ala Val Asp Asn Gly Gln Val  
 210 215 220  
 Met Cys Phe Glu Gly Asp Glu Leu Lys Thr Gln Leu Gln Asn Lys Leu  
 225 230 235 240  
 Pro His Leu Ser Ser Pro Arg Val Ala Asp Arg Ile Gly  
 245 250

&lt;210&gt; 43782

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19775

<220>

<221> UNSURE

<222> (12), (13), (20), (58), (59), (74), (77), (88), (144)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43782

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gly | Val | Ile | Pro | Ser | His | Gln | Ile | Lys | Ile | Xaa | Xaa | Thr | Lys | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Leu | Pro | Xaa | Ala | Asp | Gly | Thr | Ile | Ile | Val | Gly | Gln | Asn | Ser | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | His | Pro | Ser | Glu | Ala | Thr | Ala | Phe | Gln | Leu | Ser | Thr | Gly | Ser | Arg |
|     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Arg | Pro | Ser | Phe | Phe | Phe | Ala | Asp | Gly | Xaa | Xaa | Asp | Leu | Glu | Asp | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Pro | Ser | Asp | Ala | Ser | Asp | Ala | Ala | Xaa | Tyr | Glu | Xaa | Asp | His | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Pro | Gly | Ser | Val | Pro | Thr | Phe | Xaa | Asn | Lys | Asn | Ile | Gln | Phe | Ser | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Ala | Asn | Glu | Asp | Leu | Pro | Ala | Arg | Ile | Thr | Arg | Ile | Trp | Tyr | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asn | Pro | Tyr | Gly | Gln | Glu | Ile | Arg | Pro | Pro | Ala | Asn | Pro | Arg | Val | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Ser | Leu | Arg | Asn | Ala | Gln | Ala | Ile | Ile | Tyr | Ser | Ile | Gly | Ser | Xaa |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr | Thr | Ser | Leu | Val | Pro | Ser | Leu | Ile | Leu | Arg | Gly | Val | Gly | Gln | Ala |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ile | Ala | Thr | Ser | Pro | Ala | Arg | His | Lys | Ile | Leu | Ile | Leu | Asn | Gly | Ser |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Leu | Asp | Arg | Glu | Thr | Gly | Pro | Pro | Ser | Gln | Pro | Phe | Thr | Ala | Val | Asp |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Phe | Val | Glu | Ala | Ile | Thr | Arg | Ala | Gly | Glu | Glu | Ser | Arg | Gly | Arg | Pro |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Val | His | Leu | Pro | Ser | Pro | Pro | Tyr | Ser | Ser | Tyr | Val | Thr | His | Leu | Leu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| His | Leu | Glu | Ala | Val | Phe | Thr | Thr |     |     |     |     |     |     |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     |     |     |     |     |     |     |

<210> 43783

<211> 191

<212> PRT

<213> A.fumigatus

<400> 43783

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Met | Glu | Thr | Ser | Arg | Glu | Thr | Leu | Gln | Ala | Leu | Ser | Leu | Val | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Thr | Trp | Tyr | Gln | Ala | Ala | Val | Pro | Phe | Leu | Tyr | Glu | Lys | Leu | Gln |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Cys | Leu | Thr | Thr | Thr | Pro | Gln | Leu | Gln | Glu | Asp | Val | Glu | Gln | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Met | Lys | His | Ser | Leu | Arg | Lys | Gln | Tyr | Leu | Arg | Tyr | Leu | Arg | Arg | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Asp | Leu | Val | Gly | Arg | Ser | Gly | Lys | Arg | Ser | Leu | His | Leu | Ala | Ala | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gln | Glu | Asp | Ala | Glu | Gly | Pro | Ile | Met | Leu | Asp | Asn | Phe | Leu | Asp | Arg |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

## 19776

Glu Leu Trp Gln Arg His Thr Phe Arg Leu Cys Arg Gly Glu Thr Thr  
                   100                  105                  110  
 Thr Pro Asp Tyr Ala Ser Leu Ala Arg Phe Ile Ala Ala Val Ser Asn  
                   115                  120                  125  
 Leu Arg Glu Leu Asn Trp Val Arg Ala Leu Arg Phe Pro Gln Glu Val  
                   130                  135                  140  
 Leu Asp Ala Leu His Lys Tyr His Pro Ser Cys Lys Leu Asn Leu Leu  
 145                  150                  155                  160  
 Tyr Phe Tyr Leu Gln Ala Trp Lys Tyr Gln Gly Leu Ser Asp Asn Asp  
                   165                  170                  175  
 Met Thr Val Val Thr Ser Pro Cys Leu His Thr Ile Arg Cys Tyr  
                   180                  185                  190

&lt;210&gt; 43784

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43784

Ala Leu Ile Asn Leu Pro Ile Ala Ala Phe Val Thr Val Asp Pro Ser  
 1                  5                  10                  15  
 Thr Gly Ser His Ile Ser Lys Leu Cys Arg Arg Leu Arg Ile Pro Val  
                   20                  25                  30  
 Asn Val Ser Asp Ala Pro Asp Leu Cys Ser Phe Asn Leu Leu Ser Thr  
                   35                  40                  45  
 Tyr Ser Asp Gly Pro Leu His Ile Gly Ile Thr Thr Ser Gly Arg Gly  
                   50                  55                  60  
 Cys Lys Leu Ala Ser Arg Leu Arg Arg Glu Ile Ser Ala Ser Leu Pro  
 65                  70                  75                  80  
 Pro Asn Leu Gly Thr Ala Ile Asp Arg Leu Gly Ala Val Arg Arg Arg  
                   85                  90                  95  
 Leu Trp Ala Glu Asp Tyr Ala Ala Gly Leu Cys Asp Gly Ile  
                   100                  105                  110

&lt;210&gt; 43785

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (57)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43785

Ala Met Met Ser Ser Cys Ile Ser Leu Thr Arg Leu Ala Asp Gly Arg  
 1                  5                  10                  15  
 Val Asp Val Asp Leu Asn Ser Arg Ile Ala Arg Thr Leu Ala Gln Ile  
                   20                  25                  30  
 Ile Glu Leu Gln Gln Glu Asp Ile His Asn Pro Pro Pro Asp Tyr Gln  
                   35                  40                  45  
 Gln Glu Leu Gln Gln Gln Arg Asp Xaa Asp Gln Asp His Gln Leu Glu  
                   50                  55                  60  
 Pro Ile Glu Cys Ser Ile His Leu Asn Ile Val  
 65                  70                  75



19777

<210> 43786  
<211> 121  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (114)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43786  
Trp Arg Lys Asp Ile Gln Gln Met Ser Leu Cys Glu Phe Pro Ser Leu  
1 5 10 15  
Glu Val Arg Leu Leu Leu Leu Thr Asp His Leu Thr Gln Trp Ser Asn  
20 25 30  
Phe Glu Ile Gly Ser Leu Glu Trp Leu Arg Ser Lys Gln Tyr Leu Asp  
35 40 45  
Tyr Phe Asp Ala Leu Asp His Asp Gly Gly Phe Phe Tyr Glu Arg Trp  
50 55 60  
Gly Asp Ala Pro Val His Ser Ile Ala Ala Gly Ile Met Leu Lys Lys  
65 70 75 80  
Glu Glu Ile His Phe Phe Asn Glu Ile Ala Tyr Tyr His Ile Pro Phe  
85 90 95  
Thr His Cys Pro Thr Ser Glu Gln Met Arg Leu Asp Val Leu His His  
100 105 110  
Gly Xaa Glu Glu Cys Arg Ser Ser Ser  
115 120

<210> 43787  
<211> 125  
<212> PRT  
<213> A.fumigatus

<400> 43787  
Thr Arg Lys Lys Val Ser Pro Arg Gly Val Phe Phe Ser Phe Phe Pro  
1 5 10 15  
Leu Phe Pro Pro Gly Pro Pro Ile Ser Pro His Leu Gly Asn Gly Leu  
20 25 30  
Gly Asn Tyr Arg Arg Tyr Tyr Trp Arg Val Glu Pro Ser Ile Glu Leu  
35 40 45  
Tyr Cys Asp Ile Ser Phe Asp Pro Phe Lys Leu Met Lys Glu Gln Asn  
50 55 60  
Lys Lys Tyr Ser Phe Val Leu Ser Leu Tyr Glu Tyr Tyr Asp Thr Ile  
65 70 75 80  
Pro Ser Leu Trp Asp Ser Val Lys Lys Phe Met Gly Asn His Pro Glu  
85 90 95  
His Ile Ala Glu Gly Asn Ala Met Gly Phe Leu Ser Asp Asp Gly Gly  
100 105 110  
Lys Thr Tyr Asn Lys Cys His Phe Val Ser Phe Pro His  
115 120 125

<210> 43788  
<211> 138  
<212> PRT  
<213> A.fumigatus

# 19778

<400> 43788

Leu Trp Ser Phe Gln Pro Arg Gly Glu Asp Asp Glu Ile Cys Gly Ile  
 1 5 10 15  
 Phe Ala Arg Ala Ser Asp Pro Glu Leu Arg Ala Ile Ser Gln Ala Phe  
 20 25 30  
 Gly Ala Arg Tyr Asn Ser Ser Leu Glu Ser His Ile Glu Lys Glu Phe  
 35 40 45  
 Ser Gly His Met Lys Asp Ala Leu Leu His Met Leu Arg Thr Ala Leu  
 50 55 60  
 Asp Pro Ala Met Arg Asp Ala Asp Leu Leu Glu Asp Cys Met Lys Gly  
 65 70 75 80  
 Met Gly Thr Lys Asp Glu Lys Leu Val Thr Arg Val Val Arg Leu His  
 85 90 95  
 Trp Asn Arg Gln His Leu Asp Gln Val Lys Arg Ala Tyr His His Arg  
 100 105 110  
 Tyr Lys Arg Asp Leu Ile Ala Arg Val Arg Gly Glu Thr Ser Gly Asp  
 115 120 125  
 Tyr Gln Lys Leu Met Val Ala Leu Leu Glu  
 130 135

<210> 43789

<211> 174

<212> PRT

<213> A.fumigatus

<400> 43789

Gly Leu Tyr Thr Glu Thr Pro Met Ala Asn Ser Glu Leu Phe Asp Gln  
 1 5 10 15  
 Ile Arg Gln Gly Lys Ala Arg Trp Leu Arg Gly Asp Ile Val Ser Leu  
 20 25 30  
 Thr Glu Asp Gly Val Met Phe Asn His Arg Ser His Gly Val Pro Lys  
 35 40 45  
 Gly Gly Pro Gly His Glu Ser Val Val Pro Gly Asp Val Ile Ile Met  
 50 55 60  
 Ala Thr Gly Phe Lys Arg Pro Ser Leu Asn Phe Leu Pro Asn Asp Cys  
 65 70 75 80  
 Phe Glu Asp Pro Tyr Gly Pro Pro Ser Trp Tyr Leu Gln Val Phe Pro  
 85 90 95  
 Pro Lys Tyr Thr Ser Ile Cys Ala Asn Asn Ser Thr Tyr Ile Asn Ala  
 100 105 110  
 Ile Gly Thr Val Gly Asn Met His Ile Gly Ile Tyr Thr Arg Phe Leu  
 115 120 125  
 Leu Met Phe Leu Val Asp Pro Leu Ser Arg Pro Thr Glu Gly Arg Met  
 130 135 140  
 Lys Thr Trp Ile Asp Phe Thr Arg Phe Met Lys Arg Leu Ala Pro Thr  
 145 150 155 160  
 Gly Ala Phe Asp Phe Thr Tyr Ala Glu Leu Ile Tyr Trp  
 165 170

<210> 43790

<211> 106

<212> PRT

<213> A.fumigatus

<400> 43790

Phe Ser Phe Val Cys Gly His Ser Asp Ser Pro Ala Ser Asp Pro Pro

# 19779

```

1          5          10          15
Phe Asp Ser Leu Phe Leu Phe Ser Pro Arg Ser Leu Leu Ala Ser Leu
20          25          30
Ser Leu Ser Leu Phe Pro Ser Arg Asp Phe Ser Phe Glu Lys Leu Ser
35          40          45
Ser Ser Leu Pro Val Leu Pro Cys Leu Ser Cys Ser Phe Ser Ala Pro
50          55          60
Ala Ser Leu Leu Pro Ser Leu Arg Arg Thr Glu Leu Leu Arg Ala Leu
65          70          75          80
Ile Ile Leu Pro Leu Ala Pro Pro Phe Pro Pro Leu Leu Leu Leu Phe
85          90          95
Ala Ser Leu Ala Ser Ile Phe Gly Leu Val
100          105

```

<210> 43791

<211> 227

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (214), (225)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43791

```

Gly Arg Gln Arg Ser Lys Asn Lys Arg Gly Lys Lys Asn His Ala Ser
1          5          10          15
Gln Thr Ser Pro Lys Ile Glu Ala Arg Glu Ala Lys Arg Ser Lys Arg
20          25          30
Gly Gly Lys Gly Gly Ala Arg Gly Arg Ile Ile Ser Ala Arg Arg Ser
35          40          45
Ser Val Leu Leu Arg Glu Gly Arg Arg Glu Ala Gly Ala Glu Lys Glu
50          55          60
His Asp Lys Gln Gly Arg Thr Gly Arg Glu Glu Ser Phe Ser Lys
65          70          75          80
Glu Lys Ser Arg Glu Gly Lys Arg Glu Arg Glu Arg Glu Ala Arg Arg
85          90          95
Asp Leu Gly Glu Lys Arg Asn Arg Glu Ser Lys Gly Gly Ser Glu Ala
100          105          110
Gly Glu Ser Glu Trp Pro Gln Thr Lys Glu Asn Gln Glu Glu Glu Arg
115          120          125
Ser Ser Ser Ala Lys Ala Lys Lys Asn Pro Glu Glu Gly Arg Glu Asn
130          135          140
Gln Arg Val Glu Lys Gly Thr Val Arg Arg Ile Leu Arg Ala Asp Thr
145          150          155          160
Arg Gly Gly Glu Gln Glu Ala Ala Gly Val Glu Tyr Leu Asp Glu Asn
165          170          175
Gly Gln Met Arg Thr Ala Thr Ala Arg Lys Glu Val Ile Leu Ser Ala
180          185          190
Gly Ala Leu Arg Thr Pro Pro Ile Leu Glu Ala Ser Gly Val Gly Asp
195          200          205
Ala Asp Arg Leu Thr Xaa His Leu Gly Gln Thr Ala Arg Thr Asn Ile
210          215          220
Xaa Lys Glu
225

```

## 19780

<210> 43792  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 43792  
 Trp Trp His Asn Pro Leu Pro Thr Pro Pro Gln Phe Pro Thr Ala Arg  
 1 5 10 15  
 Gln Ala Gly Ile His Ile Arg Asn Thr Arg Pro Ser Arg His Pro Lys  
 20 25 30  
 Ala Gly Asn Gly Ala Lys Ile Asn Gly Val Arg Lys Thr Met Arg Leu  
 35 40 45  
 Arg Leu Ala Arg Arg Ser Lys Arg Gly Arg Gln Lys Gly Ala Lys Gly  
 50 55 60  
 Glu Glu Lys Gly Glu Gln Glu Ala Glu  
 65 70

<210> 43793  
 <211> 161  
 <212> PRT  
 <213> A.fumigatus

<400> 43793  
 Arg Gln Ser Ser Leu Ser Thr Thr Ser Ser Thr Ser Gln Gly Val Lys  
 1 5 10 15  
 Gly Tyr Arg Arg Met Pro Arg Thr Arg Arg Ser Asn Arg Leu Ser Gly  
 20 25 30  
 Ala Arg Thr Arg Tyr Thr Ser Asp Pro Phe Glu Val Ala Gly Val Ser  
 35 40 45  
 Asp Glu Ser Asp Ser Arg Glu Gly Ile Gly Pro Ser Arg Leu Asn Ala  
 50 55 60  
 Lys Gln Pro Val Arg Ala Asp Asp Ser Ser Asp Glu Glu Tyr Lys Glu  
 65 70 75 80  
 Val Gln Asn Glu Gln Asp Glu Ala Glu Glu Gly Glu Asp Glu Asp Val  
 85 90 95  
 Glu Met Val Asp Val Pro Gly Asp Asp Asp Glu Phe Val Ser Asp Glu  
 100 105 110  
 Glu Asp Glu Ile Asp Ser Lys Lys Pro Lys Ser Ala Gly Val Ser Arg  
 115 120 125  
 Val Lys Asn Pro Lys Arg Arg His Asp Asp Gly Ser Val Ala Ile Ala  
 130 135 140  
 Glu Asp Glu Thr His Phe Arg Gly Thr Trp Ser Pro Gly Glu His Val  
 145 150 155 160  
 Gly

<210> 43794  
 <211> 157  
 <212> PRT  
 <213> A.fumigatus

<400> 43794  
 Val Ser Ser Ser Ala Ile Ala Thr Glu Pro Ser Ser Cys Arg Arg Leu  
 1 5 10 15  
 Gly Phe Leu Thr Arg Glu Thr Pro Ala Asp Leu Gly Phe Phe Glu Ser  
 20 25 30

## 19781

```

Ile Ser Ser Ser Ser Ser Glu Thr Asn Ser Ser Ser Ser Pro Gly Thr
    35          40          45
Ser Thr Ile Ser Thr Ser Ser Ser Pro Ser Ser Ala Ser Ser Cys
    50          55          60
Ser Phe Trp Thr Ser Leu Tyr Ser Ser Ser Glu Glu Ser Ser Ala Arg
65          70          75          80
Thr Gly Cys Phe Ala Phe Ser Arg Glu Gly Pro Ile Pro Ser Leu Glu
    85          90          95
Ser Asp Ser Ser Leu Thr Pro Ala Thr Ser Lys Gly Ser Leu Val Tyr
    100          105          110
Leu Val Leu Ala Pro Asp Arg Arg Leu Asp Leu Arg Val Arg Gly Ile
    115          120          125
Arg Arg Tyr Pro Leu Thr Pro Trp Leu Val Asp Asp Val Val Glu Ser
    130          135          140
Asp Asp Cys Leu His His Gly Gly Leu Glu Gly Gln Gln
145          150          155

```

&lt;210&gt; 43795

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (137), (138)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43795

```

Glu Ala Val Asp Ala Pro Lys Thr Trp Ser Gly Gly Asn Cys His Val
1          5          10          15
Gln Pro Leu Pro Pro Ser Val Ser Val Met Ser Gly Asn Ile Thr Tyr
    20          25          30
Pro Ile Ser Pro Ser Arg Pro Pro Leu Leu Phe Gln Ser Ile Val Ala
    35          40          45
Arg His Leu Val Asp Phe Asn Phe Arg Ile Thr Tyr Leu Leu Phe Cys
    50          55          60
Ser Trp Thr Leu Gln Ile Tyr Asp Arg Val Thr Ala Val Met Thr Asn
65          70          75          80
Ser Asp Pro Lys Asn Lys Cys Cys Gly Thr Asp Cys Asp Asn Glu Ala
    85          90          95
Gly Thr Leu Gln Cys Pro Thr Cys Leu Lys Leu Gly Val Lys Gly Ser
    100          105          110
Tyr Phe Cys Ser Gln Glu Cys Phe Lys Lys Asn Trp Val Gly Asn Ile
    115          120          125
Gln Asp Asp Ile Pro Arg Pro Pro Xaa Xaa
130          135

```

&lt;210&gt; 43796

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43796

```

Arg Pro Pro Leu Arg Leu Asn Pro Lys Arg Ser Ala Gln Ile Thr Lys
1          5          10          15
Leu Arg Asp Thr Ala Asn Gln Ala Tyr Arg Lys Ser Asn Tyr Ala Glu

```

## 19782

20 25 30  
 Ala Val Lys Leu Tyr Thr Tyr Ala Ile Asp Met Ala Leu Ser Arg Pro  
 35 40 45  
 Gly Trp Glu Pro Val Asn Leu Ala Arg Asp Glu Leu Ser Gly Leu Tyr  
 50 55 60  
 Ala Asn Arg Ser Gln Ala His Met Ala Gln Gln Ala Trp Pro Glu Gly  
 65 70 75 80  
 Met Ile Asp Ala Lys Ala Ser Cys Asp Cys Lys Pro Ile Gly Asn Val  
 85 90 95  
 Lys Ala Trp Trp Arg Ala Gly Lys Cys Leu Ala Glu Met Gly Arg Trp  
 100 105 110  
 Glu Glu Ala Lys Thr Ile Leu Glu Arg Gly Leu Asp Ile Glu Gly Lys  
 115 120 125  
 Thr Gly Glu Gly Gly Lys Glu Leu Gly Ala Leu Leu Glu Glu Val Gln  
 130 135 140  
 Gln Arg Leu Gln Lys Ser Ala  
 145 150

<210> 43797  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 43797  
 Asn Thr Lys Met Asp Thr Ser Thr Lys Pro Ser Ser Ser Leu Pro Ser  
 1 5 10 15  
 Ser Asn Pro Pro Ser Val Glu Gly Ala Tyr Lys Arg Lys Cys Ile Ala  
 20 25 30  
 Leu Lys Lys Arg Leu Asn Glu Ile Glu Ala Glu Asn Glu Met Met Arg  
 35 40 45  
 Met Arg Asn Lys Arg Gly Trp Gln Tyr Ile Gln Lys Met Arg Leu Glu  
 50 55 60  
 Ser Cys  
 65

<210> 43798  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

<400> 43798  
 Ile Asp Gly Ile Asp Glu Asp Ser Ile Ala Lys Pro His Arg Pro Leu  
 1 5 10 15  
 Pro Ser Gly Arg Ile Thr Pro Gly Gln Ala Thr Leu Leu Tyr Arg Val  
 20 25 30  
 Leu Phe Phe Leu Met Trp Val Ala Ala Val Tyr Thr Asn Thr Ile Ser  
 35 40 45  
 Cys Thr Leu Val Tyr Ser Ile Ala Ile Val Val Tyr Asn Glu Gly Gly  
 50 55 60  
 Leu Ala Ala Ile Pro Val Val Lys Asn Leu Ile Gly Ala Ile Gly Leu  
 65 70 75 80  
 Gly Cys Tyr Cys Trp Gly Thr Thr Ile Ile Phe Gly Ile  
 85 90

<210> 43799  
 <211> 100

19783

<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (56), (64)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43799  
Gly Pro Asn Asn Leu His His Asn Arg Leu Asp Arg Thr Ala Val Gln  
1 5 10 15  
Thr Leu Leu His Gln Tyr Ser Ser Arg Ala Lys Ser Asp Gly His Leu  
20 25 30  
Ile Asn Ala Ser Lys Gln Asp Ser Gln Cys Val Glu His Gly Val Phe  
35 40 45  
Leu Ser Tyr Val His Val Glu Xaa Leu Ser Trp Leu Thr Lys His Xaa  
50 55 60  
Tyr Thr Val Pro Ala Ser Ser Val Lys Trp Tyr Ser Trp Arg Lys Leu  
65 70 75 80  
Ser Ser Arg Lys Tyr Leu Leu Pro Ser Ser Pro Arg Gly Trp Ala Ile  
85 90 95  
Thr Arg Ser Glu  
100

<210> 43800  
<211> 154  
<212> PRT  
<213> A.fumigatus

<400> 43800  
Leu Arg Ser Gly Pro Arg Pro Cys Gly His Ala Ala Val Ile Cys Leu  
1 5 10 15  
Cys Ser Gln Arg Thr Arg Asp Ala Arg Cys Gly Arg Ser Ala Pro Leu  
20 25 30  
Leu Arg Arg Glu Phe Glu Arg His Leu Arg Ala Leu Glu Leu Tyr Arg  
35 40 45  
Asp Leu Asp Asp Glu Arg Pro Gly Gly Val Gly Ile Tyr Phe Ile Ser  
50 55 60  
His Val Gly Gly His Lys Tyr Ala Ala Asn Val Ile Ile Tyr Arg Arg  
65 70 75 80  
Arg Asp Phe Glu Trp Tyr Arg Lys Glu Asn Pro Gly Gln Asp Thr Leu  
85 90 95  
Gly Lys Thr Thr Val Glu Ala Asp Glu Gly Ala Ala Gln Gly Ile Trp  
100 105 110  
Leu Ala Arg Val Arg Pro Glu Asp Cys Glu Asn Ile Val Lys Tyr Thr  
115 120 125  
Val Leu Gln Gly Lys Val Val Lys Pro Gly Leu Gln Leu Arg Gly Gly  
130 135 140  
Phe Asp Arg Glu Arg Gly Lys Ile Ser Trp  
145 150

<210> 43801  
<211> 195  
<212> PRT  
<213> A.fumigatus

19784

<400> 43801

```

Asn Cys Ile Ile Asp Val Leu Asp Glu Ser Lys Ser Asp Ser Gln Glu
1           5           10           15
Thr Leu Met Arg Gln Met Asp His Ser Phe Asn Asn Pro Arg Arg Thr
          20           25           30
Cys Ser Ala Pro Ser Ser Ile His Leu Leu Ile Leu Ser Arg Pro Tyr
          35           40           45
Pro Glu Leu Glu Gln Tyr Leu Ser Ala Phe Lys Ser Met Asp Leu Gly
          50           55           60
Ser Cys Arg Glu Ile Thr Asn Asp Leu Arg Ala Met Ile Lys Asp Arg
65           70           75           80
Val Glu Gly Leu Ala Arg Arg Arg Lys Tyr Pro Lys Ser Val Phe Glu
          85           90           95
Lys Val Ser Gln Ile Leu Glu Glu Lys Ala Ala Gly Thr Phe Leu Trp
          100          105          110
Val Gly Ile Ala Cys Ala Lys Leu Ala Arg Val Gln Ser Arg Arg Ala
          115          120          125
Val Glu Thr Leu Gln Ala Leu Pro Gln Glu Leu His Ser Leu Tyr Arg
          130          135          140
Lys Leu Leu Leu Ala Ala Val Ser Asp Cys Asp Glu Asp Asp His Arg
145           150           155           160
Val Val Met Glu Ile Leu Gly Phe Val Ala Phe Ala Gln Arg Pro Leu
          165           170           175
Thr Ile Ile Glu Val Ala Glu Ala Cys Arg Leu Tyr Thr Ser Arg Gln
          180          185          190
Ala Trp Lys
          195

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<210> 43802

<211> 193

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (193)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43802

```

Leu Leu His Ser Ala Arg Arg Ser Thr Pro Cys Gly Glu Asp Val Arg
1           5           10           15
Leu Val Glu Lys Met Gly Ser Leu Tyr Thr Gln His Tyr Ala Ser Thr
          20           25           30
Val Gly Gly Ser Met Thr Arg Asn Thr Phe Asp Leu Ile Tyr His Gly
          35           40           45
Glu Val Ala Gly Ile Ser Asn Thr Arg Pro Leu Phe Ala Ala Leu Ile
          50           55           60
Lys Gly Leu Leu Ala Pro Ile Ser Gly Ser Glu Gly Ile Asn Ile Asn
65           70           75           80
Ile Val Asn Ala Glu Leu Val Ala Arg Glu Arg Gly Ile Phe Val Asn
          85           90           95
Glu Gln His Ser Arg Asp Pro Ala Asp His Ser Tyr Ser Tyr Ser Ser
          100          105          110
Leu Val Thr Leu Val Ala Arg Pro Pro Ser Arg Ala Ser Ser Arg Ala
          115          120          125
Pro Ala Pro Asp Ala Thr Ser Gln Thr Gly Pro Asn Pro His Asp Gln

```



## 19785

```

      130              135              140
Arg Ile Ile Ser Gly Thr Cys Ser Gly Asp Gln Pro Leu Ile Asn Arg
145              150              155              160
Leu Gly Arg Phe Glu Thr Ser Phe Val Pro Glu Gly Thr Leu Leu Ile
      165              170              175
Cys Glu Asn Tyr Asp Ser Pro Gly Lys Ile Gly Ala Val Gly Ser Leu
      180              185              190
Xaa

```

<210> 43803  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43803
Lys Glu Ser Gln Cys Val Ser Leu Val Ser Ser Trp Pro Val Ala Asn
1              5              10              15
Ser Ala Asn Leu Leu Gly Gln Glu Ile Phe Glu Lys Pro Gln Phe Phe
      20              25              30
Val Asn Gly Pro Thr Ala Ser Asp Val Arg Gln Gly Arg Asp Gly Glu
      35              40              45
Cys Trp Phe Ile Ala Ala Leu Cys Thr Met Gly Asn Lys Asn Gly Leu
      50              55              60
Ile Lys Lys Ile Cys Val
65              70

```

<210> 43804  
 <211> 130  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (7)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 43804
Asp Gly Ser Ile Ala Gly Xaa Ala His Trp Arg Arg Pro Gly Arg Asp
1              5              10              15
Pro Glu Leu Val Arg Lys Trp Met Ala Gly Lys Glu Glu Trp Asp Lys
      20              25              30
Lys Phe Ala Lys Glu Lys Leu Arg Val Gln Lys Gln Arg Met Lys Glu
      35              40              45
Leu Ala His Gly Phe Gln Asp Phe Asp Gly Asp Thr Ala Pro Pro Ser
      50              55              60
Ser Val Ala Ala Arg Arg Leu Ala Pro Gly Ile Leu Pro Gln Lys Gly
65              70              75              80
Gly Lys His Arg Lys Ser Tyr Gln Met Thr Leu Trp Ser Arg Met Ala
      85              90              95
Ser Lys His Asp Lys Lys Thr Leu Ala Arg Glu Gln Ala Met Gln Lys
      100              105              110
Glu Glu Gly Arg Ser Arg Leu Thr Ser Val Asp Gly Gly Arg Ala Trp
      115              120              125
Ala Ser
130

```

19786

<210> 43805  
 <211> 90  
 <212> PRT  
 <213> A.fumigatus

<400> 43805  
 His Ile His Tyr Ile Tyr Thr Pro Ser Thr Leu Val Ala Gln Ser Ile  
 1 5 10 15  
 Ser Thr Asp Thr Lys Arg Lys His Arg Pro Met Asn Ala Gly Ile Tyr  
 20 25 30  
 His Pro Gln His Pro His Pro Lys Val His Gln His Leu Leu Leu Tyr  
 35 40 45  
 His Arg Leu Phe Arg Pro Leu Val Gln Thr His Pro Leu Leu His Pro  
 50 55 60  
 Val Pro Phe Thr Pro Leu Ile Arg Thr Gly Leu Pro Pro Ser His Leu  
 65 70 75 80  
 Thr Thr Val Pro Leu Leu Arg Arg Pro Gln  
 85 90

<210> 43806  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 43806  
 Leu Leu His Ser Leu Ala Asn Gly Phe Ala Tyr Trp Gln Gly Gln Glu  
 1 5 10 15  
 Leu Ser Asn Ala Thr Asn Thr Tyr Phe Asp Asp Met Ala Gln Ala Leu  
 20 25 30  
 Gly His Ile Glu Gln Val Ala Gly Ser Asn Ala Asp Lys Ile Arg Phe  
 35 40 45  
 Gly Asn Gly Glu Thr Gly Trp Pro Thr Ser Lys Phe Cys Thr Phe  
 50 55 60

<210> 43807  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 43807  
 Thr Ala Gly Gly Thr Asn Tyr Gly Pro Ala Val Ala Ser Thr Ala Asn  
 1 5 10 15  
 Ala Ala Asp Tyr Tyr Lys Ser Ala Val Cys Gly Met Leu Ala Trp Gly  
 20 25 30  
 Val Asp Val Phe Tyr Phe Glu Ala Phe Asp Glu Ser Trp Lys Pro Lys  
 35 40 45  
 Thr Lys Gly Asp Asn Gly Glu Met Gln Asp Glu Thr His Trp Gly Ala  
 50 55 60  
 Phe Thr Ala Asp Arg Lys Ala Lys Phe Asp Leu Thr Cys Pro Lys His  
 65 70 75 80

<210> 43808  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

19787

<400> 43808

```

Arg Arg Arg Ile Val Gly His Pro Thr Lys Ile Asp Leu Leu Tyr Ala
1           5           10           15
Leu Thr Asp Ile Gly Ser Thr Tyr Arg Trp Glu Gln Glu Leu Asn Lys
          20           25           30
Trp Ile Pro Val Thr Asp Leu Val Gly Pro Glu Asp Glu Asn Leu Leu
          35           40           45
Gly Thr Glu Ser Val Ala Thr Asp Ile Phe Ile Trp Arg Lys Ala Gly
          50           55           60
Ser Arg Val Pro Ile Thr Leu Arg Ser Ser Cys
65           70           75

```

<210> 43809

<211> 85

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (73), (77)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43809

```

His Pro Arg Leu Ser Asn Trp Pro His Pro Leu Ile Met Asp Asn Ser
1           5           10           15
Asp Pro Phe Ile Met Met Ala Glu Ala Asn Lys Thr Tyr Gly Phe Thr
          20           25           30
Ile Ala Val Lys Glu Leu Arg Glu Thr Val Pro Asn Ile Phe Arg Tyr
          35           40           45
Ala Ser Ala Tyr Met Arg Lys Asn Asn Leu Lys Ser Lys Gly Leu Trp
          50           55           60
Glu Met Phe Leu Glu Lys Pro Glu Xaa Glu Glu Pro Xaa Pro Asp Glu
65           70           75           80
Asp Leu Ile Ser Asp
          85

```

<210> 43810

<211> 66

<212> PRT

<213> A.fumigatus

<400> 43810

```

Met Pro Pro Gln Ser Pro Asp Val Asn Phe Asp Ile Ser Val Gln Val
1           5           10           15
Leu Leu Met Gln Leu Arg Arg Arg Thr Asp Glu Val Met Gln Pro Val
          20           25           30
Phe Arg Glu Glu Phe Ala Ser Lys Thr Met Ile Thr Val Ala His Arg
          35           40           45
Leu Arg Thr Ile Leu Val Val Ile Trp Trp Tyr Ser Ser Thr Arg Gly
          50           55           60
Val Phe
65

```

<210> 43811

<211> 124

19788

<212> PRT

<213> A.fumigatus

<400> 43811

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Thr | Pro | Ser | Val | Pro | Pro | Ser | Gly | Arg | Arg | Glu | Lys | Gly | Gly | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Thr | Thr | Ala | Ser | Tyr | Val | Arg | Pro | Ser | Asn | Pro | Pro | Ser | Pro | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Arg | Ser | Thr | Ala | His | Pro | Gln | Pro | Val | Ala | Leu | Pro | Pro | Pro | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Ala | Ala | Ala | Ala | Glu | Thr | Ala | Pro | Ala | Asp | Pro | Ala | Glu | His | His |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Thr | Arg | Ser | Ser | Ser | Pro | Pro | Ser | Arg | Arg | Ser | Ser | Pro | Arg | Thr | Tyr |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Asn | Ser | Thr | Ala | Pro | Ala | Ala | Gly | Ser | Arg | Pro | Arg | Arg | Leu | Pro | Ser |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Pro | Pro | Arg | Arg | Lys | Arg | Ala | Ser | Ser | Arg | Ala | Tyr | Pro | Gly | Pro | Trp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Pro | Gly | Ala | Gly | Cys | Arg | Leu | Trp | Arg | Arg | Arg |     |     |     |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     |     |     |     |

<210> 43812

<211> 62

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (49)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43812

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Lys | Thr | Asn | Phe | Gly | His | Gly | Glu | Gly | Ala | Ser | Gly | Leu | Thr | Ala |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Val | Ile | Lys | Ala | Val | Leu | Ala | Leu | Glu | Asn | Arg | Thr | Ile | Pro | Pro | Asn |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Met | His | Phe | Arg | Gln | Pro | Asn | Pro | Phe | Ser | Lys | Asn | Gln | Pro | Leu | Cys |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Xaa | His | Pro | Arg | Arg | Gln | Arg | Tyr | His | Ala | Met | Pro | Arg | Gly |     |     |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |

<210> 43813

<211> 179

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (91)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43813

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Leu | Ser | His | Glu | Ala | Ala | Lys | Val | Leu | Gln | Thr | Gly | Ser | Cys | Ser |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Ser | Ala | Met | Val | Ala | Gly | Thr | Asn | Met | Phe | Leu | Thr | Leu | Ser | Met | Ser |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |

```
<210> 43814
<211> 195
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (177)
<223> Identity of amino acid sequences at the above locations are unknown.
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 43814 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Phe         | Asp | Leu | Arg | Val | Thr | Arg | Asp | Gly | Asn | Thr | Leu | Val | Thr | Lys | His |  |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Gly         | Ile | Ile | Thr | Phe | Gln | Pro | Phe | Glu | Thr | Val | Leu | Tyr | Gln | Ile | Lys |  |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Asn         | Phe | Ala | Asp | Ser | His | Lys | Ser | Glu | Phe | Ile | Phe | Leu | Asp | Leu | Asp |  |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Leu         | Ala | His | Glu | Asp | Gly | Val | Gly | Gly | Asp | Val | Leu | Ala | Met | Leu | Ile |  |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Lys         | Val | Leu | Gly | Asp | Gly | Lys | Glu | Asp | Ala | Phe | Ala | Thr | Ala | His | Val |  |  |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |  |  |
| Gly         | Pro | Asp | Gly | Lys | Met | Tyr | Asn | Thr | Asp | Leu | Thr | Trp | Ala | Lys | Leu |  |  |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Arg         | Glu | Asp | Gly | Lys | Gln | Tyr | Val | Val | Ile | Tyr | Gly | Glu | Glu | Glu | Lys |  |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Val         | Asn | Gly | Glu | Thr | Lys | His | Tyr | Asp | Ser | Gly | Lys | Tyr | Trp | Ala | Pro |  |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Gln         | Ala | Gly | Asn | Ile | Arg | Asp | Asn | Trp | Ala | Asp | Asp | Tyr | Glu | Asp | Lys |  |  |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Ser         | Pro | Gln | Glu | Ile | Val | Asn | Trp | Leu | Asp | Gln | Val | Leu | Ala | Gln | Trp |  |  |
| 145         |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |  |  |
| Lys         | Lys | Glu | Lys | Leu | Trp | Ile | Thr | Gln | Phe | Ile | Asp | Thr | Pro | Arg | Pro |  |  |
|             |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Xaa         | Tyr | Phe | Val | Tyr | Arg | Pro | Gly | Gly | Lys | Val | Leu | Ile | Cys | Pro | Arg |  |  |
|             |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |

Lys Gly Lys  
195

<210> 43815

<211> 164

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (161)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43815

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Ala | Asn | Ser | Asp | Ala | Lys | His | Leu | Val | Thr | Ile | Val | Leu | Phe | Thr |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Val | Glu | Tyr | Asp | Ser | Ser | Ala | Leu | Gly | Gly | Pro | Leu | Pro | Leu | Ser |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Ser | Glu | Ser | Leu | Arg | Cys | Ile | Ser | Pro | Asn | His | Ala | Pro | Thr | Arg |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Asp | Phe | Tyr | Arg | Val | Val | Val | Asn | Asp | Met | Ala | Ser | Gly | His | Trp | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Ile | Leu | Asp | Glu | Leu | Lys | Lys | Asp | Phe | Arg | Thr | Phe | Leu | Arg | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Val | Ser | Ile | Leu | Lys | Met | Asp | Arg | Pro | Asp | Thr | Pro | Thr | Val | Asp | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Lys | Val | Ala | Pro | Lys | Asn | Lys | Pro | Ala | Ile | Ile | Ala | Gly | Arg | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Thr | Ala | Leu | Arg | Gly | Asn | Ile | Leu | Glu | Ala | Ile | His | Leu | Ala | Ser |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Ala | His | Leu | Ala | Tyr | Asp | His | Ile | Asp | Arg | Asp | Leu | Val | His | Thr | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Thr | Ser | Ile | Ile | Gly | Thr | Pro | Gly | Ile | Phe | Asn | Arg | Pro | Asp | Ala |     |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Xaa | Thr | Glu | Glu |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43816

<211> 247

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (50)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43816

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ile | Gly | Lys | His | Asn | Val | Thr | Gly | Ser | Asn | Ala | Cys | Leu | Gly | Leu |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Pro | Phe | Gln | His | Arg | Met | Ala | Thr | Lys | Leu | Ser | Gly | Gly | Asn | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Arg | Lys | Leu | Ser | Leu | Gly | Ile | Ala | Leu | Met | Gly | Asn | Pro | Leu | Val | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Xaa | Asp | Glu | Leu | Ser | Ser | Gly | Met | Asp | Ala | Ala | Ser | Lys | Arg | Val |
| 50  |     |     |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |

## 19791

Met Trp Lys Thr Leu Ala Ser Val Val Pro Gly Arg Ser Ile Val Leu  
65 70 75 80  
Thr Thr His Ser Met Glu Glu Ala Asp Ala Leu Ala Thr Arg Ala Gly  
85 90 95  
Ile Met Ala Lys Arg Met Leu Ala Leu Gly Thr Thr Asp Asp Leu Arg  
100 105 110  
Lys Arg Tyr Gly Asn Lys Tyr His Val His Leu Val His Ser Gln Ala  
115 120 125  
Pro His Thr Thr Asp Glu Thr Met Glu Arg Ile Arg Asp Trp Val Gln  
130 135 140  
Lys Asn Phe Pro Gly Ala Val Ile Glu Gln Lys Thr Tyr His Gly Gln  
145 150 155 160  
Ile Arg Phe Ser Ile Pro Ala Thr Ala Ala Ser Ser Ser Pro Lys Ala  
165 170 175  
Glu Ile Thr Glu Tyr Ala Ala Gly Pro Ile Ala Glu Glu Glu Glu Leu  
180 185 190  
Gly Pro Gly Pro Arg Tyr Gln Ser Val Asn Lys Ser Ile Val Ser Ser  
195 200 205  
Ile Phe Ser Lys Leu Glu Gln Ser Lys Thr Asp Leu Gly Val Gln Tyr  
210 215 220  
Tyr Ser Val Ser Gln Thr Thr Leu Asp Gln Gly Leu His His Gly Gly  
225 230 235 240  
Ala Gly Ser Ala Asn Lys Tyr  
245

&lt;210&gt; 43817

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43817

Xaa Lys Gly Arg Ser Ser Ala Gly Leu His Ser Gln Pro Pro Gly Asp  
1 5 10 15  
Gly Val Leu Asp His Leu Pro Ile Gly Gly Val Ser Ala Gly Leu Ile  
20 25 30  
Pro Ser Ser Ser Ser Ala Pro Gln Ala Arg Ala Lys Asp Val Pro Tyr  
35 40 45  
Lys Glu Ile Leu Leu Gln Met Asp Pro Ser Gly Ile Val Leu Leu Leu  
50 55 60  
Gly Ala Ile Leu Cys Phe Leu Leu Ala Leu Gln Trp Gly Gly Ser Ala  
65 70 75 80  
Lys Ala Trp Gly Asn Ala Asp Val Val Gly Thr Leu Val Gly Phe Gly  
85 90 95  
Leu Leu Leu Ile Ala Phe Ala Ile Asn Glu Leu Trp Leu Gln Glu Lys  
100 105 110  
Ala Met Ile Pro Pro Arg Leu Phe Lys Gly Gln Thr Ile Leu Phe Ser  
115 120 125  
Ser Leu Phe Thr Phe Phe Phe Ser Gly Ser Phe Tyr Leu Leu Leu Tyr  
130 135 140  
Tyr Leu Pro Thr Tyr Phe Gln Ser Val Lys Gly Ala Ser Ala Ser Asp  
145 150 155 160

## 19792

Ser Gly Val Arg Thr Leu Pro Leu Val Leu Gly Asp Gly Leu Phe Ala  
                           165                          170                          175

Thr

<210> 43818

<211> 181

<212> PRT

<213> A.fumigatus

<400> 43818

Ala Thr Met Thr Ala Val Val Lys Thr Ser Ile Arg Ile Pro Glu Asp  
 1                  5                  10                  15  
 Val Phe Pro Thr Ile Thr Arg Thr Pro Gly Ser Met Ile Asn Phe Arg  
                   20                  25                  30  
 Tyr Tyr Val Glu Val Val Val Asp Leu Arg Gly Lys Leu Thr Ser Pro  
                   35                  40                  45  
 Glu Arg Phe Leu Pro Arg Phe Asn Met Val Ser Ser Gly Ser Asn Phe  
                   50                  55                  60  
 Ser Pro Ser Gly Gln Val Leu Asn Pro Ser Asp Ala Asn Gly Asn Ser  
 65                  70                  75                  80  
 Ile Thr Thr Asn Trp Ala Gly Asn Ile Leu Asp Thr Ala Gln Ile Arg  
                   85                  90                  95  
 Arg Glu Lys Gly Val Val Ala Val Ala Phe Glu Val Val Ile Gly Thr  
                   100                  105                  110  
 Arg Asp Ser Gln Arg His Lys Glu Lys Thr Glu Arg Thr His Ser Val  
                   115                  120                  125  
 Ala Ala Val Ser Asp Ile Ser Pro Pro Gln Ala His Pro Ala Ala Glu  
                   130                  135                  140  
 Ser Asp His Trp Gln Asn Gly Tyr Ser Pro Met Pro Thr Thr Asn Ser  
 145                  150                  155                  160  
 Glu Tyr Leu Pro Gln Thr Asp Tyr Gly Phe Pro Val His Arg Pro Gly  
                   165                  170                  175  
 Gly Glu Asp Pro Arg  
                   180

<210> 43819

<211> 106

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (91)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43819

Ala Gly Thr Trp Ala Arg Leu Pro Ser Phe Tyr Arg Glu Asn Thr Ser  
 1                  5                  10                  15  
 Asp Thr Ile Val Asp Tyr Thr Thr Phe Leu Val Ala Asp Glu Lys Thr  
                   20                  25                  30  
 Ala Leu Asp Glu Asp Thr Leu Leu Leu Val Tyr Asp Val Glu Gly Leu  
                   35                  40                  45  
 Gln Glu Ser Ile Arg Leu Ser Ala Cys Phe Ala Asn Ser Glu Ala Val  
                   50                  55                  60  
 Ser Val Ser Val Ala Thr Lys Asp Val Gly Glu Leu Trp Thr Leu Ala



## 19793

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Asp | Glu | Asp | Gly | Val | Tyr | Arg | Gly | Gly | Pro | Xaa | His | Pro | Pro | Pro | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys | Gly | Gly | Lys | Ala | Pro | Arg | Lys | Arg | Leu |     |     |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

&lt;210&gt; 43820

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (9), (10)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43820

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Val | Ser | Phe | Ser | Arg | Arg | Val | Xaa | Xaa | Phe | Phe | Thr | Thr | Asp | Cys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Gly | Gly | Pro | Lys | Gln | Tyr | Asn | Gln | Phe | Pro | Val | Asp | Lys | Lys | His |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Phe | Ser | Met | Ile | Ala | Glu | Leu | Phe | Ala | Pro | Lys | Ser | Arg | Gly | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Thr | Leu | Lys | Ser | Lys | Asp | Pro | Lys | Glu | Asn | Pro | Val | Ile | Asp | Cys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Tyr | Leu | Ser | Asp | Pro | Leu | Asp | Leu | Leu | Val | Leu | Thr | Glu | Ala | Cys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg | Phe | Gly | Asn | Glu | Ile | Val | Met | Asn | Gly | Ala | Gly | Thr | Lys | Asp | Ile |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Lys | Gly | Ser | Trp | Pro | Pro | Asn | Leu | Lys | His | His | Thr | Tyr | Lys | Thr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Glu | Glu | Trp | Ile | Pro | Tyr | Val | Lys | Glu | His | Ala | Thr | Thr | Cys | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Ser | Ser | Val | Leu | Ala | Thr | Arg | Arg | Ser | Tyr | Ile |     |     |     |     |     |
|     |     | 130 |     |     |     |     | 135 |     |     |     |     |     |     |     |     |

&lt;210&gt; 43821

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43821

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ile | Arg | Thr | Arg | Asn | Lys | Thr | Val | Leu | Tyr | Leu | Thr | Asp | Gly | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Tyr | His | Ala | Ala | Gly | Thr | Cys | Ala | Met | Gly | Lys | Asp | Gly | Asp | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Met | Ala | Val | Leu | Asp | Asn | Lys | Leu | Arg | Val | Arg | Gly | Val | Ala | Gly | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Val | Ala | Asp | Cys | Ser | Val | Met | Pro | Thr | Leu | His | Gly | Gly | His |     |
|     |     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43822

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (151), (154), (157)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43822

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Leu | Thr | Pro | Arg | Arg | Val | Tyr | Asn | Cys | Arg | Thr | Arg | Thr | Ser |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Leu | Pro | Pro | Val | Leu | Thr | Leu | Ser | Thr | Pro | Glu | Met | Asp | Asp | Asp | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Lys | Phe | Val | Leu | Arg | Gly | His | Leu | Leu | Asp | Cys | Tyr | Glu | Trp | Ile |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Tyr | Phe | Pro | Tyr | Leu | Leu | Glu | Ala | Ile | Ala | His | Ala | Ala | Pro | Arg | Asn |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Pro | Ala | Thr | Asp | Glu | Phe | Val | Val | Arg | Gly | Leu | Ala | Met | Ala | Ala | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg | Ile | His | Lys | Asn | Arg | Lys | Gly | Phe | Arg | His | Arg | His | His | Gly | Val |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Trp | Leu | Met | Leu | Arg | Ser | Cys | Thr | Arg | Ser | Ala | Leu | Leu | Leu | Val | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Ala | Ser | Arg | Ala | Ala | Gly | Gly | Val | Arg | Asp | Met | Leu | Pro | Val | Gly | Trp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |
| Lys | Ala | Ala | Val | Arg | Gly | Ala | Val | Glu | Met | Leu | Ala | Tyr | Trp | Arg | Asp |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| Asp | Ala | Gly | Asp | Ala | Arg | Xaa | Arg | Leu | Xaa | Val | Leu | Xaa | Asp | Val | Val |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ala | Gly | Trp | Gly | Glu |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 165 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43823

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (148)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43823

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Pro | Val | Ala | Cys | Ile | Thr | Ala | Glu | Arg | Gly | Leu | Pro | Phe | His | Pro |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Ser | Ser | Pro | Ser | Pro | Pro | Arg | Lys | Trp | Thr | Thr | Thr | Cys | Ser | Ser | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Cys | Ala | Ala | Thr | Ser | Ser | Thr | Ala | Thr | Ser | Gly | Ser | Thr | Ser | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Cys | Ser | Lys | Arg | Leu | His | Thr | Gln | Pro | Arg | Ala | Thr | Arg | Pro | Pro |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Met | Ser | Leu | Ser | Ser | Ala | Ser | Pro | Trp | Pro | Pro | Ser | Ala | Ser | Thr |     |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg | Thr | Ala | Arg | Ala | Ser | Ala | Thr | Val | Thr | Thr | Ala | Ser | Gly | Ser | Cys |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Cys | Ala | Arg | Val | Arg | Gly | Val | Arg | Ser | Cys | Trp | Leu | Arg | Arg | Val | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Arg | Arg | Gly | Val | Cys | Ala | Ile | Cys | Cys | Leu | Trp | Val | Gly | Arg | Arg | Arg |
|     |     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |

## 19795

Phe Gly Ala Arg Trp Lys Cys Trp Arg Thr Gly Gly Met Thr Pro Gly  
 130 135 140  
 Met Arg Gly Xaa Gly  
 145

<210> 43824  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<400> 43824  
 Pro Leu Val Thr Cys Pro His Cys Leu Ser Glu Val Lys Thr Glu Arg  
 1 5 10 15  
 Glu Val Val Ala Ala Gln Ala His His Arg Gly Ser Asp Ser Thr Ser  
 20 25 30  
 Gly His Lys Thr Pro Pro Pro Ser Leu Arg Arg Arg Lys Ser Arg Cys  
 35 40 45  
 Ser Val Gln Lys Gly Ser Pro Pro Asn Arg Val Thr Lys Arg Lys Thr  
 50 55 60  
 Gln Val Lys Pro Asn Ile Arg Ala Ser Ala Ser Lys Gln His Pro Ala  
 65 70 75 80  
 Lys Ser Lys Thr Lys Gly His Val Phe Val Cys Ser Phe Ser Arg Tyr  
 85 90 95  
 Gly Cys Ala Ser Thr Phe Ala Ser Lys Asn Glu Trp Lys Arg His Ile  
 100 105 110  
 Ala Ser Gln His Val Gln Leu Gly Phe Phe Arg Cys Asp Val Gly Asn  
 115 120 125  
 Cys Asn Gly Gly His Lys Pro Asn Asn Lys Met Thr Ser Thr Ser Thr  
 130 135 140  
 Leu Asn His His Asp Gln Pro Gly His Gln Thr Asn Asp Phe Asn Arg  
 145 150 155 160  
 Lys Asp Leu Phe Thr Gln His Gln Arg Arg Met  
 165 170

<210> 43825  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 43825  
 His Arg Asp Ile Ser Ile Leu Ile Arg Ser Gln Arg Leu Pro His Leu  
 1 5 10 15  
 Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys Thr Ser Thr Ile Leu Ala  
 20 25 30  
 Leu Ala Arg Arg Ile Tyr Gly Ser Asn Asn Met Arg Gln Met Val Leu  
 35 40 45  
 Glu Leu Asn Ala Ser Asp Asp Arg Gly Ile Asp Val Val Arg Glu Gln  
 50 55 60  
 Ile Lys Thr Phe Ala Ser Thr Leu His His Thr Leu Ile  
 65 70 75

<210> 43826  
 <211> 120  
 <212> PRT  
 <213> A.fumigatus

&lt;400&gt; 43826

```

Lys Lys Ser Val Val Met Ser Leu Tyr Asn Ala Ala Ser Ala Ala Gly
1          5          10          15
Asn Ile Val Gly Pro Ile Leu Phe Ser Ser Glu Asp Ala Pro Thr Tyr
20          25          30
His Pro Gly Leu Gln Ala Cys Leu Gly Ile Phe Val Ala Leu Val Ala
35          40          45
Val Val Leu Ile Gln Trp Ala Asp Leu Phe Val Leu Asn Lys Leu Gln
50          55          60
Glu Lys Lys Arg Val Arg Asn Gly Lys Pro Ala Lys Met Val Asp Arg
65          70          75          80
Ser Met Asp Asp His Tyr His Gly Thr Gly Gly Asp Glu Glu Ala Met
85          90          95
Gln Glu Glu Leu Gly Asn Asn Gly Leu Leu Asp Val Thr Asp Arg Asp
100         105         110
Asn Asp Glu Phe Val Tyr Ile Tyr
115          120

```

&lt;210&gt; 43827

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43827

```

Ser Asp Leu Lys Ser Phe Gln Ile Leu Trp Ile Leu Phe Leu Leu His
1          5          10          15
Ala Ala Thr Met Cys Asn Tyr Phe Lys Asn Tyr Tyr Ile Tyr Ser Ser
20          25          30
Cys Arg Glu Pro Ser Gln His Phe Ile Arg Thr Ser Val Asp Gly Ala
35          40          45
Lys Glu Ser Lys Cys Pro Asp Ser Pro His Asp Arg Phe Ile Val Val
50          55          60
Val Gly Lys Cys Arg Leu Cys Pro Pro Arg
65          70

```

&lt;210&gt; 43828

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43828

```

Leu Pro Ser Val Xaa Asn Ser Arg Ala Ser Gly Glu Ser Arg Gly Glu
1          5          10          15
Asp Leu Ala His Asp Leu Arg Pro Arg Ala Leu Gln Trp Asp Gly Val
20          25          30
Met His Gly Asn Ser Ala Cys Ala Leu Pro Pro Ser Ile Asn Ser Ala
35          40          45
Val Pro Phe Pro Ala Ala His Met Ala Ala Pro Gln Glu Leu Leu Leu
50          55          60
Leu Ser Pro Gln Ala Pro Ala Asp Pro Gly Ser Ser Gln Gly Ser Pro
65          70          75          80

```

## 19797

Ser Glu Leu Gly Ala Gly Gly Tyr Pro Asp Val Asn Thr Thr Ser Gly  
                   85                  90                  95  
 Val Arg Leu Ile Leu Leu Tyr Pro Ser Thr Gly  
                   100                  105

<210> 43829  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 43829  
 Cys Val Val Ser Asn Val Thr Pro Glu Asp Gln Ala Val Val Thr Ala  
 1                  5                  10                  15  
 Cys Ser Tyr Leu Phe Arg Ser Leu Gly Ser Val Ile Gly Val Ser Leu  
                   20                  25                  30  
 Ser Ser Thr Val Val Gln Gln Leu Arg Ser Gln Leu Arg Phe Ala  
                   35                  40                  45  
 Leu Arg Asp Ser Lys Asp Ile Asp Arg Ile Val Glu Gly Val Arg Gln  
                   50                  55                  60  
 Ser Leu Asp Tyr Ile Lys  
 65                  70

<210> 43830  
 <211> 171  
 <212> PRT  
 <213> A.fumigatus

<400> 43830  
 Asp Pro Glu Asp Arg Glu Arg Ile Ala Asp Val Val Phe Arg Arg Met  
 1                  5                  10                  15  
 Arg Asp Asp His Gln Arg Leu Leu Thr Asp Val Arg Arg Asp Gly Ile  
                   20                  25                  30  
 Asp Glu Arg Trp Arg Arg Arg Ala Phe Tyr Thr Asp Val Glu Asp Gly  
                   35                  40                  45  
 Ala Thr Ala Pro Glu Gly Tyr Val Ser Asp Pro Asp Val Asp His Leu  
                   50                  55                  60  
 Ser Glu Asp Glu Asp Ala Pro Gly His Pro Ser Ala Leu Asp Ser His  
 65                  70                  75                  80  
 Pro Pro Ser Pro Arg Ser Arg Ser Ser Ser Lys Val Arg Phe Gln Asp  
                   85                  90                  95  
 Asp Leu Thr Asp Asp Tyr Asp Val Arg Ser Asn Pro Ser Thr Ser Ser  
                   100                  105                  110  
 Arg Ser Ile Pro Val Gly Glu Arg Trp Gly Gly Phe Glu Ile Pro Glu  
                   115                  120                  125  
 Val Glu Lys Asp Val Gly Lys Glu Ile Leu Tyr Gln Val Thr Gln Gln  
                   130                  135                  140  
 Gly Phe Asn Glu Leu Leu Asp Ile Leu Phe Lys Pro Asn Glu Val Ile  
 145                  150                  155                  160  
 Ala Thr Asp Leu Thr Asn Pro His Ser Arg Ser  
                   165                  170

<210> 43831  
 <211> 178  
 <212> PRT  
 <213> A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43831

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Lys | Gly | Val | Ser | Leu | Ser | Thr | Arg | Thr | Ile | Tyr | Ser | Met | Ala | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ser | Ile | Gly | Leu | Phe | Gln | Glu | Asp | Asp | Leu | Met | Glu | Arg | Ser | Leu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Ser | Leu | Pro | Asp | Thr | Ala | Ile | Pro | Ile | Ile | Thr | Asp | Tyr | Ile | Asp |
|     |     | 35  |     |     |     |     |     | 40  |     |     |     | 45  |     |     |     |
| Lys | Leu | Cys | His | Ala | Thr | Asp | Leu | Cys | Lys | Asp | His | Ser | Leu | His | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Cys | Leu | Asp | Gly | Asp | Asn | Thr | Pro | Gly | Met | Asp | Glu | Glu | Ala | Leu | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Met | Val | Lys | Val | Met | Gln | Gln | Asn | Ile | Glu | Arg | Trp | Phe | Arg | Phe | Val |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Gly | Glu | Asp | Phe | Thr | Thr | Asn | Ala | Ser | Ser | Ser | Asp | Arg | Leu | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Glu | Gln | Glu | Val | Lys | Leu | Ala | Thr | Leu | Ala | Ala | Thr | Gln | Arg | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Glu | Asn | Arg | Ala | Leu | Ser | Asn | Ser | Ser | Gly | Asn | Ser | His | Thr | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| His | Val | Thr | Leu | Arg | Ser | Gly | Gln | Asn | Phe | Tyr | Thr | Trp | Leu | His | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ser | Ala | Val | His | Asp | Val | Lys | Ser | Ala | Val | Val | Ser | Lys | Ala | Leu | Ile |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |

Cys Thr

&lt;210&gt; 43832

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43832

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gly | Gln | Cys | Arg | Leu | Thr | Ser | Gln | Leu | Phe | Leu | Trp | Val | Phe | Phe |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Trp | Thr | Asn | Arg | Trp | Gln | Val | Thr | Pro | Val | Ala | Glu | Phe | Asn | Ala | Tyr |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Asp | Ala | Phe | Ala | Ala | Ala | Arg | Val | Phe | Ala | Leu | Thr | Ser | Pro | Asn |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Lys | Thr | Thr | Met | Pro | Ser | Gly | Thr | Thr | Leu | Pro | Ser | Tyr | Pro | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

Lys Leu Ser Lys  
65

&lt;210&gt; 43833

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (4)

19799

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43833

```

Phe His Ser Xaa Leu Ala Ala Gly Cys Val Arg His Met Phe Glu Pro
1          5          10          15
Ser Ala Asp Pro Thr Val Ile Glu Pro Ile Arg Thr Gly Asp Ser Ala
          20          25          30
His Arg Ser Phe Ile Ala Ser Lys Arg Pro Ala His Gln Glu Ile Leu
          35          40          45
Arg Val Leu Arg Glu Asn Asp Pro Asp Thr Val Thr Leu Val Ala Val
          50          55          60
Gly Pro Leu Thr Asn Leu Ala Leu Ala Ser Ala Glu Asp Ala Glu Thr
65          70          75          80
Phe Leu Arg Val Lys Glu Val Val Val Met Gly Gly Ala Val Asn Glu
          85          90          95
Pro Gly Asn Val Gly Leu Pro Pro Ser Tyr Ser Tyr Gly Ser Phe Ser
          100          105          110
Gly Leu Thr Gly Gly Arg Ser His Pro Leu Gln Ser Ser Thr His Thr
          115          120          125
Pro Thr His Ser Pro Arg Arg Ala Phe Ser Pro Ser Pro Pro Leu Thr
          130          135          140
Pro Lys Pro Pro Cys His Pro Ala Pro Pro Ser Arg Pro Thr Pro Leu
145          150          155          160
Asn

```

<210> 43834

<211> 66

<212> PRT

<213> A.fumigatus

<400> 43834

```

Ala Pro Pro Phe Leu Asn Lys Ala Gly Ser Leu Thr Pro Glu Val Lys
1          5          10          15
Thr Thr Val Glu Asn Ile Met Ile Ile Asn Ser Ile Ile Ile Leu His
          20          25          30
Tyr Ile Leu Tyr Ser Asn Ile Ser Arg Asn Ser Pro Thr Leu Gly Arg
          35          40          45
Ile Val Pro Pro Gln Ile Arg Leu Lys Arg Ala Ile Lys Ala Arg Ser
          50          55          60
Pro Ser
65

```

<210> 43835

<211> 172

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (101)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43835

```

Asn Ala Ala Leu Glu Ala Gln Lys Lys Ala Ala Glu Ala Asn Asp Val
1          5          10          15

```

## 19800

Pro Lys Leu Val Ser Val Gln Gln Ala Ile Lys Phe Asn Gly Gly Gly  
                   20                  25                  30  
 His Ile Asn His Ser Phe Phe Trp Lys Asn Leu Ala Pro Glu Lys Ser  
                   35                  40                  45  
 Gly Gly Gly Lys Ile Asp Gln Ala Pro Val Phe Lys Ala Ala Ile Glu  
                   50                  55                  60  
 Gln Arg Trp Gly Ser Phe Asp Lys Phe Lys Asp Ala Phe Asn Thr Thr  
                   65                  70                  75                  80  
 Leu Leu Gly Ile Gln Gly Ser Gly Trp Gly Trp Leu Val Thr Asp Gly  
                   85                  90                  95  
 Pro Lys Gly Lys Xaa Asp Ile Thr Thr Thr His Asp Gln Asp Pro Val  
                   100                  105                  110  
 Thr Gly Ala Ala Pro Phe Phe Gly Val Asp Met Trp Glu His Ala Tyr  
                   115                  120                  125  
 Tyr Leu Gln Val His Leu His Ser Leu Arg Leu Leu Phe Phe Cys Ser  
                   130                  135                  140  
 Pro Cys Ser Phe Ala Asn Glu Ser Ile Val Leu Glu Arg Gln Ser Leu  
                   145                  150                  155                  160  
 Val Cys Gln Gly His Leu Glu Arg Asp Gln Leu Gly  
                   165                  170

&lt;210&gt; 43836

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43836

Val Ala Glu Pro Ile Ala Leu Thr Ser Ile Phe Pro Tyr Ser Trp Val  
   1                  5                  10                  15  
 Met Val Lys Asp Phe Arg Val Ala Asp Arg Thr Asp Ala Ser Leu Tyr  
                   20                  25                  30  
 Ala Gly Ile Leu Val Ser Ala Phe Ser Leu Val Glu Ala Leu Thr Gly  
                   35                  40                  45  
 Met Phe Trp Gly Gly Leu Ser Asp Arg Ile Gly Arg Lys Pro Val Leu  
                   50                  55                  60  
 Leu Ser Gly Cys Phe Gly Thr Val Leu Ser Leu Leu Leu Val Gly Phe  
                   65                  70                  75                  80  
 Ala Pro Asn Phe Trp Val Ala Leu Leu Gly Arg Ala Leu Gly Gly Leu  
                   85                  90                  95  
 Leu Asn Gly Asn Ile Gly Val Ile Gln Thr Met Val Gly Glu Leu Val  
                   100                  105                  110  
 Lys Arg Pro Glu His Glu Arg Lys  
                   115                  120

&lt;210&gt; 43837

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (12)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43837

Gln Ser Gly Lys Phe Gln His Leu Thr Pro His Xaa Met Tyr Pro Val



## 19801

```

1           5           10           15
Asp Asp Pro Gly Ala Leu Gln Tyr Leu Cys Met Gly Val Ala Ala Gln
      20           25           30
Met Thr Ser Ser Arg Tyr Val Ser Thr Lys Val Pro Val Glu Val Ile
      35           40           45
Pro Arg Tyr Leu Tyr Cys Asn Tyr Lys Tyr Tyr Pro Lys Ile
      50           55           60

```

&lt;210&gt; 43838

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (137), (150)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43838

```

Thr Val Ala Ser Ala Met Asp Thr Tyr Arg Ile Asn Arg Tyr Asn Ile
1           5           10           15
Thr Glu Gln Lys Thr Tyr Thr Asn Arg Leu Ile Gln Gly Ala Leu Arg
      20           25           30
Tyr Gln Lys Leu Asn Leu Ser Ser Ala Gly Glu Leu Glu Leu Ser Phe
      35           40           45
Val Gly Phe Lys Pro Thr Val His Glu Val Pro Met Ser Gly Leu Pro
      50           55           60
Gly Ser Phe Asn Cys Ser Asp Pro Val Leu Asn Arg Ile Trp Glu Ile
      65           70           75           80
Gly Ala Arg Thr Val Gln Leu Asn Glu Phe Pro Ala Arg Ser Leu Pro
      85           90           95
Asp Phe Trp Ile Leu Thr Glu Glu Gly Ala Leu Val Asp Ser Leu Ala
      100          105          110
Pro Gln Pro Phe Ala Ala Asp Phe Ala Ala Thr Met Ser Ala Tyr Lys
      115          120          125
Val Thr Phe Ser Val Lys Pro Val Xaa His Gly Phe Gly Phe Thr Val
      130          135          140
Leu Ser Asp Thr Leu Xaa Asn Gly Ile Tyr Ile Phe Val Asp Val Val
      145          150          155          160
Asn Ser Ser Ile Ser Ala His Ala Gly Ser Thr Glu Ile Gly
      165          170

```

&lt;210&gt; 43839

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43839

```

Thr Phe His Arg Arg Asp Glu Thr Leu Gln Pro Leu Thr Arg Gln Thr
1           5           10           15
Val Pro Thr Gly Leu Phe Ile His Asn Glu Phe Thr Pro Ser Ser Ser
      20           25           30
Asn Glu Thr Leu Thr Val Glu Asn Pro Thr Thr Gly Ser Thr Leu Gly
      35           40           45
Thr Val Ser Ala Ala Thr Ala Ala Asp Val Glu Arg Ala Val Thr Ser
      50           55           60

```

## 19802

Ala Thr Thr Gly Phe Gln Thr Trp Arg Thr Thr Pro Gly Pro Glu Arg  
 65 70 75 80  
 Gly Arg Leu Leu Leu Lys Leu Ala Asp Leu Ile Glu Arg Asp Ala Glu  
 85 90 95  
 Glu Phe Ala Ser Leu Glu Ala Val Asp Ala Gly Ile Leu Tyr Thr Asp  
 100 105 110  
 Ser Met

&lt;210&gt; 43840

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (68)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43840

Ala Leu Ser Ile Val Gly Ala Ser Trp Gly Leu Val Phe Ala Ser Phe  
 1 5 10 15  
 Ser Thr Ser Ala Ser Ala Gly Lys Ala Gln Arg His Ala Lys Lys Gly  
 20 25 30  
 Lys Ser Ser Lys Glu Arg Gln Ala Glu Gly Ser Gly Pro Leu Met Lys  
 35 40 45  
 Arg Ile Val Val Asp Gly Cys Asp Leu Leu Ile Pro Gly Val Phe Leu  
 50 55 60  
 Val Leu Thr Xaa Gly Ile Glu Ala Ser Ala Leu Pro Pro Tyr  
 65 70 75

&lt;210&gt; 43841

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43841

Phe Cys Phe Gln Pro Ile Asp Asp Ser Arg Pro Val Arg Ile Asp Gln  
 1 5 10 15  
 Gln Met Pro Ser Ala Leu Thr His Ile Phe Trp Ser Asn Thr Asp Val  
 20 25 30  
 Ser Thr Gly Ile Thr His Lys Pro Tyr Gly Val Asp Trp Ile Asn Phe  
 35 40 45  
 Glu Arg Asn Met Tyr Arg Leu Cys Val Leu Gln Gly Lys Val Arg Asp  
 50 55 60  
 Gly Asp Lys Val Pro Glu Asp Pro Trp Glu Met Phe Leu Arg Glu Leu  
 65 70 75 80  
 Ala Pro Leu Thr Lys Arg Pro Ala Gly Gln Pro Gln Pro Ser Thr Ala  
 85 90 95  
 Tyr Phe Pro Thr Ser Ile Leu Arg Ser Ser Val Gly Asn Ala Asn Ala  
 100 105 110  
 Asn Ala Ser Gly Gly Pro Ser Ala Gly Gln Asp Gly Gln His His Val  
 115 120 125  
 Leu Phe Glu Val Pro Leu Leu Arg Arg Ser Asp Glu Asn Arg Arg Asn  
 130 135 140  
 Val Gly Arg Ile Pro Arg Tyr Leu Asn

## 19803

145

150

&lt;210&gt; 43842

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (168)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43842

```

Pro Ser Ser Leu Val Val Lys Thr Ala Asp Asp Gln Gln Asn Met Pro
1          5          10          15
His Ser Thr Gln Tyr Gly Tyr Gly Asn Gln Tyr Cys Pro Tyr Gly Lys
20          25          30
Ala Gly Ile Tyr Gly Gln Pro His Gly Phe Ser Tyr Glu His Ser Ser
35          40          45
Ser Pro Ala Thr Glu Gly Ser Phe Asn Gln Ser Ala Pro Gly Arg Asp
50          55          60
Ser Val Tyr Gly Arg Thr Gly Ser Thr Gln Pro Ser Glu Thr Gln Gln
65          70          75          80
Thr Ala Ala Gly Thr Asn Ala Phe Gly Ala Gly Met Ser Asp Val Phe
85          90          95
Gly Arg Thr Gln Ala Gly Phe Gly Gln Asn Gln Pro Met Ser Gln Gln
100         105         110
Pro Pro Val Thr Ser Asp Asp Thr Lys Ser Phe Lys Thr Pro Lys Ala
115         120         125
Ala Gly Pro Ser Pro Ser Leu Ala Gln Ala Asn Arg Pro Gly Ser Asp
130         135         140
Thr Asn Asn Val Pro Gly Gln Pro Gln Ala Gln Thr Gly Leu Pro Pro
145         150         155         160
Leu Gln Ser Gln His Gly Gln Xaa Gly Phe Ser Gly Ile Pro His Leu
165         170         175
Asn Pro

```

&lt;210&gt; 43843

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43843

```

Gln Ser Gln Leu Val Met Gln Phe Ala Leu Pro Pro Arg Arg Ser Pro
1          5          10          15
His Thr Ser Ser His Thr Arg Ser Ser Arg Leu Ser Leu Gln Arg Lys
20          25          30
Lys Gln Leu Lys Thr Ala Ala Ile Leu Gly Phe Ala Ile Leu Thr Leu
35          40          45
Phe Phe Leu Leu Ser His Phe Ser His Ser Ser Thr Ala Pro Thr Ser
50          55          60
Ala Pro Ser Gly Ala Ser Ser Ile Val Ile Val Thr Asp Leu Asp Arg
65          70          75          80
Ala Arg Phe Ala Val Ile His Arg Phe Leu Thr Ser
85          90

```

<210> 43844  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

<400> 43844  
 Val Arg Ser Lys Leu Pro Tyr Gln Gly Lys Pro Ile Arg Gly Arg Pro  
 1 5 10 15  
 Glu Ile Ser Leu Gly Gly Ser Leu Thr Arg Tyr Ser Trp Arg His Ala  
 20 25 30  
 Arg Ile Phe Pro Ser Leu Leu Gly Leu Arg Phe Thr Leu Gly Ala Phe  
 35 40 45  
 Glu Ala Met Ile Gly Met Ser Ser Pro Ala Arg Ser Asp Ala Met Leu  
 50 55 60  
 Thr Gly Leu Ala Pro Pro Cys Val Ala Val Thr Gln Met Trp Trp Arg  
 65 70 75 80  
 Arg Gly Glu Gln Thr Leu Arg Thr Ala Phe Trp Asn Gly Met Asn Gly  
 85 90 95  
 Val Thr Phe Ile Val Gly Ser Leu Phe Thr Tyr Gly Leu Gly His Ile  
 100 105 110  
 His Ser Asp Ser Leu Phe Ser Tyr Gln Val Pro Pro Phe Leu Pro Gly  
 115 120 125  
 Arg Ala Thr Glu Ala Asn Glu  
 130 135

<210> 43845  
 <211> 121  
 <212> PRT  
 <213> A.fumigatus

<400> 43845  
 Ile Ile Phe Met Phe Cys Gly Leu Leu Thr Val Ala Tyr Ser Leu Leu  
 1 5 10 15  
 Ile Phe Ile Phe Met Pro Asp Ser Pro Met Glu Ala Lys Cys Leu Ser  
 20 25 30  
 Asp Arg Glu Lys Val Ile Ala Val Glu Arg Leu Arg Ala Asn Gln Met  
 35 40 45  
 Gly Ile Ile Ser Arg Glu Trp Arg Trp Asp His Val Arg Glu Thr Phe  
 50 55 60  
 Tyr Asp Leu Lys Thr Trp Cys Trp Phe Phe Leu Ile Val Ser Ile Ser  
 65 70 75 80  
 Tyr Val Val Pro Ala Arg Val Asp Leu Arg Leu Ala Leu Thr Tyr Ala  
 85 90 95  
 Glu Ser Gln Ala Glu Ala Ser Val Arg Arg Ala Thr Cys Leu His Tyr  
 100 105 110  
 Glu Pro Ala Gly Pro Asn Tyr Gly Arg  
 115 120

<210> 43846  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE

## 19805

&lt;222&gt; (74)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43846

```

Pro Cys Arg Tyr Leu Ile Gly Gln Gly Ile Gly Ser Ile Val Phe Pro
1           5           10           15
Pro Tyr Ser Glu Ala Phe Gly Arg Lys Lys Leu Tyr Ile Val Ser Thr
          20           25           30
Ala Met Tyr Ser Leu Ser Cys Ile Ile Ile Ala Ile Val Pro Ser Val
          35           40           45
Ala Gly Val Val Val Gly Arg Leu Leu Ser Gly Phe Leu Ser Ala Ile
          50           55           60
Pro Thr Asn Val Val Ala Gly Arg Ile Xaa Asp Phe
65           70           75

```

&lt;210&gt; 43847

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (58)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43847

```

Ala Thr Ala Ala Ala Thr Ile Leu Pro Ile Leu Ser Val Ser Ala Met
1           5           10           15
Ile Ile Ala Ala Tyr Gln Met Gly Phe Phe Tyr Asn Ile Lys Lys Ser
          20           25           30
Cys Asn Ser Asn Met Arg Ile Gly Leu Pro Asn His Val Arg Pro Arg
          35           40           45
Asn Thr Ile Leu Leu Pro Pro Thr Thr Xaa Pro Arg Pro
          50           55           60

```

&lt;210&gt; 43848

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43848

```

Ile Gly Pro Tyr Arg Val Gln Ser Gly Gly Pro Asp Pro Arg Arg Arg
1           5           10           15
Cys Val Ala Ala Gly Ala Thr Gly Gln Glu Thr Leu Gly Arg Leu Gly
          20           25           30
Ala Gly Phe Phe Phe Leu Asp Phe Val Val Gly Leu Arg Glu Leu His
          35           40           45
Leu Ile Val Glu Cys Val Tyr Asp Arg Asp Asp Ala Arg Gln Arg Ser
          50           55           60
Ser Ala Leu Gln Val Met Arg Ala Leu Ile Gln Asp Ala Ala Ala Gln
65           70           75           80
Gly Tyr Gly Glu Tyr Arg Thr Gln Met Asp Cys Arg Gly
          85           90

```

&lt;210&gt; 43849

&lt;211&gt; 136

19806

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (115)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43849

```
Asn Leu Ser Ser His Thr Met Asp Pro Ile Asn Pro Asp Leu Val Asn
1          5          10          15
Cys Pro Phe Met Ala Ser Ser Tyr Ser Ser Leu Asn Phe Asp Gly Pro
20          25          30
Leu Arg Val Asp Ala Asn His Ala Met Asn Pro Gln Tyr Ala Pro Asn
35          40          45
Ser Phe Val His Lys Phe Arg Pro Asp Thr Ala Glu Ala Pro Tyr Gln
50          55          60
Leu Ala Asp Asn Thr Val Ser Arg Lys Ser His Phe Tyr His Glu Gly
65          70          75          80
Lys Leu Ser Glu Tyr Asp Gln Pro Arg Ala Leu Tyr Gln Lys Val Met
85          90          95
Asp Ala Arg Gly Arg Glu His Leu His Cys Asn Thr Ala Arg Met Leu
100          105          110
Lys Val Xaa Glu Tyr Pro Glu Ile Gln Leu Arg Tyr Leu Thr Gln Leu
115          120          125
Tyr Cys Ile Ala Pro Glu Tyr Ala
130          135
```

<210> 43850

<211> 90

<212> PRT

<213> A.fumigatus

<400> 43850

```
Arg Ser Gly Ser Pro Ala His Leu Ile Leu Gln Val Glu Leu Asn Phe
1          5          10          15
Arg Cys His Thr Lys Leu Ser Leu Ala Cys Lys Asn Ser Leu Gln Leu
20          25          30
Tyr Thr Ala Ala Val Gly Asn Asn Trp Lys Arg Ser Ile Ser Met Asp
35          40          45
Tyr Trp Arg Asp Phe Cys Leu Gln Ala Cys Gly Tyr Ser Glu Lys Leu
50          55          60
Ser Tyr Asp Cys Arg Pro Arg Glu Ile Ser Val Ser Lys Tyr Arg Leu
65          70          75          80
Leu Ser Gly His Phe Cys Ser Thr Pro Ala
85          90
```

<210> 43851

<211> 217

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (19), (27), (78)

<223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43851

```

Tyr Cys Pro Arg Ser Leu Ser Val Pro Ser Ala Gly Asp Val Gln Leu
1          5          10          15
Pro Phe Xaa Glu Ser Ser Gly Ser Pro Lys Xaa Asp Ser Ala Pro Ser
          20          25          30
Gln Ser Ala Thr Thr Ile Pro Ile Pro Val Ser Lys Arg Lys Ala Ser
          35          40          45
Phe Ser Ala Pro Thr Arg Arg Val Thr Val Glu Glu Ala Arg Ala Pro
          50          55          60
Ser Gln Pro Arg Ala His His Glu Thr Asn Thr Glu Arg Xaa Pro Ala
65          70          75          80
Asn Phe Glu Ala Asn Gly Pro Glu Arg His Gly Gly Ile Val Gln Ser
          85          90          95
Ile Glu Asp Pro Gln Asn Leu Val Ser Arg Asn Asp Thr Ser Thr Pro
          100          105          110
Ala Ala Gly Ser Gln His Leu Pro Pro Val Glu Ser Ala Thr Glu Ile
          115          120          125
Arg Pro Ser Lys Arg Val Lys Leu Thr Gln Glu Ser Ser Lys Thr Ser
          130          135          140
Thr Arg Pro Thr Pro Ser Pro Ser His Val Ile Thr Pro Pro Pro Ile
145          150          155          160
Gln Pro Pro Thr Val Asp Glu Thr Met Glu Val Thr Asp Gly Ala Glu
          165          170          175
Ser Gln Pro Asn Ala Asp Gln Thr Arg Arg Ala Ser Lys Ser Arg Gly
          180          185          190
Arg Arg Ala Ser Arg Thr Ser Asn Val Glu Asp Ala Ala Gly Lys Ala
          195          200          205
Lys Arg Lys Gln Gln Arg Ser Arg Lys
          210          215

```

&lt;210&gt; 43852

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43852

```

Arg Arg Arg Cys Ser Pro Arg Phe Leu Ser Ile Asn Ala Ser Trp Thr
1          5          10          15
His Ser Thr Met Val Ser Pro Lys Ser Ser Ser His Pro Ser Ser Lys
          20          25          30
Ile Asp Val Ile Asn His Ser Leu Ile Val Ile Lys Leu Val Phe Tyr
          35          40          45
Leu Arg Pro His Pro Gly Asn Leu Gln Pro Lys Leu Thr Phe Ile His
          50          55          60
Leu Val Pro Leu Phe Ser His Lys Gln Cys Ser Thr Val Pro Gln His
65          70          75          80

```

&lt;210&gt; 43853

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43853

```

Asp Gly Thr Lys Val Val Gly Ala Gly Ala Asp Lys Ala Ala Arg Met
1          5          10          15

```

## 19808

Leu Asp Leu Ala Ala Asn Ala Thr Thr Pro Ala Gln Val Ala Ala His  
                   20                                  25                                  30  
 Asp Ala Pro Ile Arg Cys Cys His Met Ile Pro Asn Pro Ala Gly Asn  
                   35                                  40                                  45  
 Ser Pro Leu Leu Val Thr Gly Ser Trp Asp Lys Thr Ile Lys Tyr Trp  
                   50                                  55                                  60  
 Asp Leu Arg Gln Ser Thr Pro Ile Ala Thr Val Glu Cys Gln Glu Arg  
 65                                  70                                  75                                  80  
 Val Tyr Thr Met Asp Val Lys Asn Lys Leu Leu Val Val Gly Thr Ala  
                                   85                                  90                                  95  
 Asp Arg Tyr Ile Asp Ile Ile Asn Leu Asp Asn Pro Thr Lys Phe Tyr  
                   100                                  105                                  110  
 Lys Thr Ile Gln Ser Pro Leu Lys  
                   115                                  120

&lt;210&gt; 43854

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (203)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43854

Ser Ser Gln Arg Ser Glu Asp Phe Ala Ile Gln Ala Ala Ala Ile Leu  
 1                                  5                                  10                                  15  
 Asp Thr Phe Ala Ala Tyr Met His Arg Asn Phe Asp Val Thr Trp Lys  
                   20                                  25                                  30  
 Ile Arg Gly Val Thr Arg Ser Cys Thr Val Ala Lys Met Asp Ser Ile  
                   35                                  40                                  45  
 Asn Leu Thr Cys Val Pro Gly Arg Lys Tyr Trp Phe Lys Tyr Trp Leu  
                   50                                  55                                  60  
 Lys Arg Ala Val Leu Leu Ser Asp Ile Asp Leu Glu Asp Arg Leu Met  
 65                                  70                                  75                                  80  
 Val Leu Ser Pro Arg Pro Thr His Asn Gln Arg Gly Pro Leu Leu Thr  
                                   85                                  90                                  95  
 Pro Ser Ser Ser Ser Pro Ser Phe Asp Ser Thr Thr Pro Gly Ala Ser  
                   100                                  105                                  110  
 Asp Asp Asp Asp Tyr Tyr Phe Pro Pro Gly Pro Ala Phe Thr Pro Ser  
                   115                                  120                                  125  
 Val Arg Asn Ala Arg Arg Val Arg Glu Ser Ala Leu Arg Met Val Asp  
                   130                                  135                                  140  
 Val Asn Glu Tyr Leu Asn Asp Thr Pro Val Ala Leu Arg Glu Asn His  
 145                                  150                                  155                                  160  
 Arg Val Ser Arg Pro Pro Glu Cys Arg Asp Trp Ser Gly Tyr Leu Gly  
                                   165                                  170                                  175  
 Phe Val Gly Tyr Ser Gln Asp His Lys His Leu Ala Ser Ile Met Leu  
                   180                                  185                                  190  
 Gly Met Cys Gly Val Trp Asn Pro Lys Ala Xaa Gly Met Trp Asp Glu  
                   195                                  200                                  205  
 Lys His Ala Arg Arg Ser Val Tyr Trp Leu  
                   210                                  215

&lt;210&gt; 43855



<211> 166  
 <212> PRT  
 <213> A.fumigatus

<400> 43855

```

Glu Arg Leu Ser Phe Gln Arg Arg Val Lys Thr Ala Thr Ile Gly Thr
1          5          10          15
Thr Ser Gly Thr Tyr Gly Ser Ser Asn Thr Tyr Glu Ser Thr Ser Asn
          20          25          30
Thr Tyr Gly Ser Ser Asn Thr Tyr Glu Asn Arg Ser Asn Thr Ala Gly
          35          40          45
Pro His Gly Ser Asn Ile Ala Asn Lys Leu Asp Pro Arg Val Gly Ser
          50          55          60
Asp Ala Asp Asn Arg Gly Leu Gly Thr Gly Thr Gly Thr Thr Ser Gly
65          70          75          80
Thr Gly Ala Phe Gly Ser Gly Thr Gly Thr Gly Thr Gly Thr Thr Gly
          85          90          95
Tyr Gly Thr Thr Ser Ser Asn Val Gly Pro His Asp Ser Asn Ile Gly
          100          105          110
Asn Lys Leu Asp Pro Arg Val Asp Ser Asp Gln Asp Asn Arg Ala Arg
          115          120          125
Arg Gln Ala Met Ala Gly Ser Ser Tyr Thr Gly Ala Gly Thr Gly Thr
          130          135          140
Gly Thr Gly Ala Thr Ala Gly Pro His Ser Ser Asn Ile Ala Asn Lys
145          150          155          160
Leu Asp Pro Arg Val Asp
          165

```

<210> 43856  
 <211> 152  
 <212> PRT  
 <213> A.fumigatus

<400> 43856

```

Val Pro Leu Val Val Pro Met Val Ala Ala Thr Pro Thr Asn Pro Leu
1          5          10          15
Ala Thr Pro Thr Asp Leu Ala Thr Leu Met Lys Thr Glu Ala Thr Leu
          20          25          30
Leu Val Leu Thr Asp Pro Thr Leu Pro Thr Ser Ser Thr His Gly Leu
          35          40          45
Ala Pro Thr Arg Thr Thr Val Ala Trp Val Leu Ala Leu Ala Leu Pro
          50          55          60
Val Ala Leu Ala Pro Ser Ala Pro Glu Leu Glu Leu Glu Leu Glu Arg
65          70          75          80
Gln Ala Thr Ala Pro Leu Pro Gln Thr Leu Asp Pro Thr Thr Pro Ile
          85          90          95
Ser Ala Thr Ser Ser Thr Leu Val Trp Thr Ala Thr Arg Thr Thr Ala
          100          105          110
Leu Val Ala Arg Leu Trp Leu Ala Ala Thr Leu Ala Leu Val Leu
          115          120          125
Ala Pro Ala Leu Glu Leu Arg Leu Val Leu Ile Ala Pro Thr Ser Arg
          130          135          140
Thr Ser Ser Thr Leu Val Ser Ile
145          150

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<210> 43857

<211> 99  
 <212> PRT  
 <213> A.fumigatus

<400> 43857

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Trp | Pro | Glu | Ala | Phe | Ser | Leu | Phe | Tyr | Ala | Asn | Thr | Leu | Ser | Leu | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Pro | Phe | Gln | Val | Ser | Arg | Leu | Ala | Thr | Thr | Leu | Leu | Ile | Arg | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Leu | Thr | Glu | Leu | His | Ala | Ala | Val | Glu | Asn | Val | Thr | Met | Glu | His |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Cys | Leu | Lys | Phe | His | Val | Leu | Cys | Lys | Asp | Ala | Leu | Ile | Ile | Arg | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Lys | Pro | Pro | Leu | Ala | Gly | Leu | His | Thr | Ala | Ile | Leu | Asp | Leu | Leu | Thr |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Asn | Arg | Arg | Arg | Pro | Cys | Ser | Asp | Ser | Thr | Thr | Pro | Gly | Leu | Glu | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ile | Ala | Leu |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43858

<211> 108

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (104)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43858

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Gly | Thr | Gly | Cys | Phe | Arg | Ser | Trp | Ser | Glu | Met | Thr | Pro | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Leu | Leu | Gln | Ile | Phe | Gly | Trp | Arg | Ile | Gly | Trp | Thr | Ser | Met | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Tyr | Ile | Glu | Asp | Val | Val | Met | Ala | Cys | Ser | Met | Ala | Arg | Thr | Asp |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Thr | Pro | Phe | Ile | Leu | Ser | Ser | Gln | Gly | Trp | Pro | Cys | Arg | Asn | Gly | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Val | Arg | Val | Ala | Ser | Asp | Leu | Lys | Ser | Phe | Val | Leu | Asp | Ser | Phe | Tyr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Phe | Ser | Arg | Leu | Ala | Leu | Ile | Phe | Lys | Leu | Leu | Pro | Thr | Leu | Ser |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Ser | His | Thr | Gln | Leu | Ala | Gly | Xaa | Thr | Arg | Ser | Gly |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

<210> 43859

<211> 167

<212> PRT

<213> A.fumigatus

<400> 43859

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Cys | Ser | Phe | Gln | Pro | Arg | Gly | Glu | Asp | Gln | Asp | Gln | Asp | Leu | Thr |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Ala | Leu | Glu | Asp | Ile | Leu | Lys | Trp | Lys | Gly | Phe | Phe | Arg | Pro | Asn | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |

## 19811

Leu Gly Leu Leu Leu Val Ala Glu Phe Phe Pro Lys Trp His Lys Ile  
           35                          40                          45  
 Leu Tyr Ile Trp Leu Thr Asn Asp Pro Asn Phe Glu Glu Val Gly Glu  
           50                          55                          60  
 Trp Phe Thr Trp Trp Arg Thr Gln Ile Pro Ala Glu Ile Asn Glu Leu  
   65                          70                          75                          80  
 Ala Val Val Asp Asp Glu Trp Asn Lys Gly Leu Gln Gln Met Asp Leu  
                           85                          90                          95  
 Ala Ser Arg Leu Asp Asp Pro Ala Thr Glu Leu Pro Val Pro Asn Ala  
                           100                          105                          110  
 Ala Ala Gln Pro Ala Pro Pro Glu Asp Val Pro His Ala Ala Ser Glu  
                           115                          120                          125  
 Ala Pro Ala Pro Ser Arg Lys Pro Asn Val Val Glu Glu Ile Ala Phe  
           130                          135                          140  
 Lys Asp Ile Leu Glu Ser Trp Cys Met Glu Gln Gly Leu Ile Ile Leu  
   145                          150                          155                          160  
 Pro Leu Arg Glu Ala His Pro  
                           165

&lt;210&gt; 43860

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43860

Lys Ala Lys Trp Val Ala Glu Gln Leu Val Leu Glu Ala Gly Arg Arg  
   1                          5                          10                          15  
 Gly Leu Pro Val Lys Ile His Arg Ala Gly Thr Ile Ser Gly His Ser  
                           20                          25                          30  
 Val Thr Gly Ala Ala Asn Ala Trp Asp Leu Leu Ser Ala Leu Ile Val  
           35                          40                          45  
 Glu Ser Ile Lys Leu Gly Tyr Ala Pro Asp Val Asp Gly Trp Arg Ala  
           50                          55                          60  
 Glu Met Thr Pro Val Asp Phe Val Ser Lys Ala Ile Val His Leu Ala  
   65                          70                          75                          80  
 Thr Gln Thr Gln Ala Gly Gln Thr Ile Phe His Leu Gly Asp Pro Asp  
                           85                          90                          95  
 Pro Val Asp Thr Arg Arg Val Phe Asp Ala Leu Ser Glu Leu Gly Tyr  
                           100                          105                          110  
 Pro Thr Lys Arg Leu Gly Trp Asp Glu Trp Val Ala Leu Trp Thr Glu  
                           115                          120                          125  
 Lys Gln Arg Ser Val Lys Gly Gly Asp Gly Ala Phe Thr Val Asp Ile  
           130                          135                          140  
 Leu Arg Ser Gly Met Pro Thr Val Glu Phe Leu Arg Gly Ile Val Val  
   145                          150                          155                          160  
 Leu Asp Asn Ala Ala Thr Asn Pro Phe Arg Ala Val Val Glu Trp Ser  
                           165                          170                          175  
 Arg Val Asp Arg Ala Leu Leu Glu Thr Tyr Thr Arg His Trp Phe Ala  
                           180                          185                          190  
 Arg Gly Trp Leu Pro Lys Ala Pro Ala Arg Leu Ala Asn Pro Val Val  
           195                          200                          205  
 Ala Ile Arg Gly Pro Leu Asn Arg Arg Val Ala Val Ile His Arg Gly  
           210                          215                          220  
 Ser Ser Gly Tyr Trp Arg Pro Leu Trp Ala Thr Ala Pro Pro Ser Ala  
   225                          230                          235                          240  
 Lys Gly Met Pro Cys Phe Pro Trp Pro Val Arg Pro Ser Gly Tyr Ser

## 19812

245  
Leu Glu Phe Pro Phe Ile  
260

250

255

<210> 43861  
<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 43861  
Ser Leu Ile Leu Pro Ala Ala Gly Glu Asn Ile Trp Gly Leu Pro Ala  
1 5 10 15  
Ala Thr Met Glu Ile Leu Lys Leu Asn Asn Gly His Leu Arg Val Met  
20 25 30  
Ser Leu Cys His Asn Ala Leu Gln Ile Met Ala Gly Arg Ile Val Leu  
35 40 45  
Tyr Val Thr Phe Leu Val Arg Leu Leu Ala Ser Leu Ala Pro  
50 55 60

<210> 43862  
<211> 108  
<212> PRT  
<213> A.fumigatus

<400> 43862  
Ala Ala His Gln Asp Ala Leu Ala Ser Pro Met Gly Val Tyr Phe Arg  
1 5 10 15  
Val Gly Leu Asp Ala Gly Thr Lys Leu Gly His Ser Leu Gly Gly Leu  
20 25 30  
Leu Thr Met Gln Asp Leu Asp Ala Gly Tyr Gly Glu Arg Thr Leu Thr  
35 40 45  
Trp Gly Gly Gly Met Thr Leu Phe Trp Phe Ile Asp Arg Lys Asn Gly  
50 55 60  
Leu Cys Ser Val Cys Ala Ile Gln Ala Ser Leu Pro Phe Asn Thr Asp  
65 70 75 80  
Ala Val Met Ala Leu Arg Gln Thr Phe Arg His Asp Ile Tyr Arg Lys  
85 90 95  
Tyr Ala Ala Phe Lys Ala Gln Glu Arg Gln Gly Val  
100 105

<210> 43863  
<211> 92  
<212> PRT  
<213> A.fumigatus

<400> 43863  
Arg Arg Gly Thr Leu Ala Arg Lys Ile Thr Val Asp Pro Asn Met Thr  
1 5 10 15  
Leu Glu Glu Phe Ile Glu Ser Leu Gly Glu Arg Ala Glu Ala Gln Leu  
20 25 30  
Lys Lys Pro Ser Met Arg Thr Glu Lys Thr Leu Tyr Gln Arg Phe  
35 40 45  
Pro Pro Gln Leu Glu Glu Gln Thr Arg Ser Asn Leu Lys Leu Lys Leu  
50 55 60  
Lys Glu Leu Val Glu Asn Gly Gln Glu Ile Ala Val Ser Asp Pro Ala  
65 70 75 80

## 19813

Tyr Ser Ile Asp Phe Arg Phe Gln Leu Ile Phe Lys  
85 90

<210> 43864  
<211> 65  
<212> PRT  
<213> A.fumigatus

<400> 43864

Ser Phe Ala Arg Arg Ile Arg Thr Lys Thr Met Leu Ala Ser Thr Leu  
1 5 10 15  
Gly Pro Ser Arg Thr Pro Thr Tyr Thr Leu Val Thr Arg Pro Gln Arg  
20 25 30  
Phe Ala Pro Cys Ile Leu Phe Met Ser Lys Ile Thr Ser Leu Leu Pro  
35 40 45  
Gly Asn Val Ser Ser Ala Tyr Ile His Ala Val Ala Gly Ala Phe Ala  
50 55 60  
Arg  
65

<210> 43865  
<211> 102  
<212> PRT  
<213> A.fumigatus

<400> 43865

Ser Lys Met Asn Arg Phe Met Gly Ala Leu Ser Asn Ser Gly Arg Arg  
1 5 10 15  
Ser Ala Asn Tyr Val Gly Phe Tyr Lys Gly Ile Gln Ser Cys Gly Ala  
20 25 30  
Ala Ile Val Asn Asn Leu Asp Ala Arg Lys Leu Ser Tyr Glu Lys Glu  
35 40 45  
Phe Ile Ser Asn Trp Val Leu Leu Ser Val Ser Leu Val Val Ala Ala  
50 55 60  
Pro Val Ile Phe Phe Lys Ile Arg Asp His Ile Asp Val Gln Asp Asp  
65 70 75 80  
Leu Ala Gly Thr Asp Glu Thr Ile Ala Asp Val Leu Pro Ala Asn His  
85 90 95  
Pro Glu Lys Ala Val Ala  
100

<210> 43866  
<211> 144  
<212> PRT  
<213> A.fumigatus

<400> 43866

Ser Met Val Trp Phe Lys Leu Arg Phe His Asn Ala Ala Asn Met Ala  
1 5 10 15  
His Met Val Ser Phe Asp Asn Gly Arg Thr Leu Lys Gln Lys Ala Asp  
20 25 30  
Phe Ala Asn Ser Lys Cys Leu Gly Gly Leu Phe Ser Trp Ala Leu Asp  
35 40 45  
Leu Gly Gly Pro Gly Ser Leu Ala Asn Pro Asn Asp Leu Ser Tyr Asp  
50 55 60  
Asp Thr Ser Met Glu Gly Ala Asn Ala Gly Gly Gly Thr Asp Gly Thr

## 19814

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Gly | Leu | Phe | Tyr | Val | Gly | Pro | Gly | Asp | Leu | Arg | Arg | Lys | Ser | Lys | His |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Asp | Cys | Cys | Gly | Pro | Arg | Ser | Thr | Ser | Ser | Phe | Arg | Asn | Ser | Phe |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Asp | Pro | Arg | Gln | Pro | Leu | Ile | Ser | Ala | Leu | Gly | Phe | Pro | Thr | Ser |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Glu | Val | Pro | Thr | Ser | Thr | Thr | Thr | Tyr | Arg | Ser | Tyr | Ala | Gly | Thr |
|     | 130 |     |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |

&lt;210&gt; 43867

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43867

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ile | Xaa | Ala | Cys | Arg | Ala | Ser | Arg | Met | Asn | Met | Cys | Ala | Gly | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Leu | Leu | Trp | Arg | Asn | Asn | Ile | Asp | Pro | Ala | Lys | Val | Leu | Leu | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Leu | Gly | Phe | Tyr | Gly | Arg | Ser | Phe | Thr | Leu | Glu | Asp | Ser | Ser | Cys | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Pro | Gly | Cys | Ala | Phe | Ser | Thr | Thr | Ser | Gly | Ser | Gly | Gly | Ala | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Gly | Glu | Cys | Thr | Gly | Thr | Ser | Gly | Ile | Leu | Ser | Asp | Tyr | Glu | Ile |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Arg | Ile | Ile | Asp | Asp | Tyr | Ser | Val | Asn | Val | His | Tyr | Asp | Glu | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ala | Gly | Val | Asn | Trp | Met | Thr | Trp | Ser | Gly | Asp | Gln | Trp | Tyr | Gly | Leu |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     | 110 |     |     |     |
| Asn | Tyr | Asp | Phe | Thr | Thr | Pro | Leu | Thr | Trp | His | Ile | Trp | Ser | Leu | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Thr | Met | Ala | Glu | His | Ser | Ser | Arg | Arg | Pro | Ile | Ser | Arg | Ile | Ala | Asn |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Leu | Ala | Ala | Phe | Ser | Val | Gly | Arg | Leu | Ile | Leu | Glu | Ala | Leu | Ala |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Leu | Trp | Pro | Ile | Leu | Thr | Ile |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 165 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43868

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (22)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43868

Lys Ile Lys Ile Lys Trp Lys Ile Thr Val Arg Thr Phe Arg Pro Arg

## 19815

```

1           5           10           15
Asn Leu Thr Leu Phe Xaa Thr Arg Tyr Ile Leu Ile Leu Pro Leu Ile
      20           25           30
Leu Leu Leu Trp Thr His Tyr Leu Ala Phe Phe Phe Ile Ile Ile Leu
      35           40           45
Ser Ser Cys Leu Leu Ser Leu Phe Ser Ser Thr Phe Tyr Leu Ser Thr
      50           55           60
Ile
65

```

<210> 43869  
 <211> 150  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43869
Lys Gln Ile Cys Ile Leu Ser Thr Pro Pro Pro Pro Thr Pro Ser Tyr
1           5           10           15
Ala Met Asn Leu Ser His Val Tyr Glu Met Leu Ser Ser Gln Ile Thr
      20           25           30
Phe Asn Pro Ile Thr Pro Ile His Asp Ala Thr Arg Ser Thr Gln Val
      35           40           45
Asp Arg Gln Ser Pro Arg Ser Asn Leu Ser Asp Thr Pro Pro Leu Lys
      50           55           60
Ser Pro Ile Pro Arg Gly Ser Pro Pro Pro Pro Pro Ser Leu Val Leu
      65           70           75           80
Val Arg Arg Arg Pro Pro Pro Pro Pro Lys Pro Tyr Pro Ser Arg Val
      85           90           95
Pro His Pro Phe Asp Pro Tyr Pro Ser Arg Pro Leu Cys His Pro Pro
      100          105          110
Ser Gln Gly Pro Gly Leu Leu Leu Gly Pro Cys Pro Leu Ser Pro Pro
      115          120          125
Ile Asn His Gln Gly Arg Pro Leu Pro Thr Gln Arg Lys Ser Ile Arg
      130          135          140
Val Ser Ala Phe Thr Ser
      145          150

```

<210> 43870  
 <211> 138  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (1)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 43870
Xaa Ile Ser Ser Gln Lys Pro Gly Tyr Lys His Ala Gly Tyr Asp Val
1           5           10           15
Asp His Pro Ile Ile Pro His Gly Val Ser Val Ala Val Thr Ala Pro
      20           25           30
Ala Val Phe Arg Phe Thr Ala Ala Ser Asn Pro Asp Arg His Leu Ala
      35           40           45
Ala Ala Glu Ala Phe Gly Val Asp Ile Ser Asn Val Lys Arg Glu Ser
      50           55           60

```

## 19816

Ala Gly Glu Val Leu Gly Glu Ala Leu Ala Lys Phe Leu Ala Asp Leu  
 65 70 75 80  
 Gly Asp Gln Pro Arg Gly Leu Asn Asp Leu Gly Phe Lys His Ser Asp  
 85 90 95  
 Ile Glu Ser Leu Val Glu Gly Thr Ile Pro Gln Lys Arg Val Leu Met  
 100 105 110  
 Leu Ala Pro Asn Leu Ser Gly Glu Leu Glu Arg Glu Arg Asp Glu Leu  
 115 120 125  
 Arg Gly Leu Leu Glu Gln Ser Met Glu Tyr  
 130 135

&lt;210&gt; 43871

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43871

Leu Arg Leu Ser Gly Pro Gly Leu Lys Pro Glu Pro Glu Arg Arg Asp  
 1 5 10 15  
 Thr Pro Val Pro Leu Asn Ser Lys Thr Ser Thr Pro Thr Pro Asn Asp  
 20 25 30  
 Pro Thr Pro Glu Glu Pro Ser Asn Ser Asn Val Ala Ser Trp Ser Pro  
 35 40 45  
 Gln Asp Val Val Met Trp Met Leu Gln Leu Gly Phe Glu Glu Ser Ile  
 50 55 60  
 Val Glu Lys Phe Phe Ile Asn Asp Ile Ser Gly Ala Ile Leu Leu Glu  
 65 70 75 80  
 Leu Glu Ala Asn Asp Leu Lys Glu Leu Asp Ile Gln Ser Phe Gly Lys  
 85 90 95  
 Arg His His Leu Met Asn Cys Ile Arg Gln Leu Lys Ser Ser Ala Ser  
 100 105 110  
 Met Pro Gly Gly Asp Ile Gln Val Thr Trp Asp Pro Ser Ser Arg Glu  
 115 120 125  
 Asp Asn Ser Thr Pro Lys Thr Thr Ala Ala Asp Val Gly Thr Asn Cys  
 130 135 140  
 Cys Thr Ser Pro Val Thr Asp Glu Glu Arg Pro Asp Ser Gly Asn Lys  
 145 150 155 160  
 Gln His Lys His Arg Arg Arg Arg  
 165

&lt;210&gt; 43872

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43872

Ile Leu Thr Ala Lys Tyr Leu Pro Leu Asp Val Asn Ile Gly Ile Gly  
 1 5 10 15  
 Phe Phe Ala Ser Pro Leu Thr Asn Leu Thr Val Asn Gln Ser Gln Leu  
 20 25 30  
 Lys Thr Gly Asp Tyr Pro Gln Gln Ile Ser Gln Pro Pro Met Ser Pro  
 35 40 45  
 Ala Ser Gln Gly Glu Ser Ser Leu Ser Arg Arg Ser Cys Ile Arg Cys  
 50 55 60  
 Asn Gln Arg Lys Val Gly Cys Asp Arg Lys Gln Pro Cys Ser Arg Cys  
 65 70 75 80



## 19817

Leu Lys Ala Gly Ala Glu Cys Ile His Ser Gly Asn Lys Arg Ala Pro  
                   85                  90                  95  
 Arg Lys Leu Lys Arg Pro Pro Ile Ser Lys Ile Leu Val His Leu Gln  
                   100                  105                  110  
 Glu Leu Glu  
                   115

&lt;210&gt; 43873

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (38)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43873

Leu Cys Ser Glu Thr Leu Val Ser Pro Ile Ala Leu Ala Arg Leu Ser  
 1                  5                  10                  15  
 Met Ser Glu Met Ala Ala Ala Met Leu Val Ala Ala Ser Ala Gln Glu  
                   20                  25                  30  
 Ala Pro Thr Ala Arg Xaa Gln Ala Arg Phe Phe Ser Asn Ile Ser Glu  
                   35                  40                  45  
 Ala Asp Cys Val Arg Pro Lys Asp Ser Ser Lys Gly Tyr  
                   50                  55                  60

&lt;210&gt; 43874

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43874

Tyr Leu Ala Val Gly Ala Ser Cys Ala Leu Ala Ala Thr Asn Ile Ala  
 1                  5                  10                  15  
 Ala Ala Ile Ser Asp Met Asp Asn Leu Ala Arg Ala Ile Gly Asp Thr  
                   20                  25                  30  
 Arg Val Ser Leu Gln Ser Tyr Gln Gly Gly Ala Phe Gly Ala Ile Asn  
                   35                  40                  45  
 Thr Ala Ser Ala Val Asn Asn Ala Lys Leu Ala Ala Arg Ala Ala Arg  
                   50                  55                  60  
 Glu Asn Leu Ala Ala Ser Gly Ala Phe Thr Pro Asp Glu Ala Ala Gln  
 65                  70                  75                  80  
 Tyr Tyr Glu Ala Tyr Met Lys Met Thr Pro Val Leu Leu Asp Ala Leu  
                   85                  90                  95  
 Thr Val Ala Lys Asp Lys Val Arg  
                   100

&lt;210&gt; 43875

&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43875

Arg Ala Leu Ser Ala Gly Ser Ala Gly Pro Val Val Glu Asp Lys Gly  
 1                  5                  10                  15

## 19818

Gln Arg Ala Glu Glu Val Arg Gln Ser Gly Gly Ser Gln Ile Ser Val  
 20 25 30  
 Arg Glu Cys Ala Thr Ala Gly Trp His Gln Ile Lys Val Val Cys Lys  
 35 40 45  
 Arg Thr Asn Ile Val Phe Trp Arg Ser Arg Asn Tyr Gly Phe Thr Arg  
 50 55 60  
 Leu Phe Asn His Val Val Ile Ala Leu Val Thr Gly Leu Ala Phe Leu  
 65 70 75 80  
 Asn Leu Asp Asp Ser Arg Ala Ser Leu Gln Tyr Arg Ile Phe Val Ile  
 85 90 95  
 Phe Asn Val Thr Val Leu Pro Ala Ile Ile Leu Gln Gln Val Glu Pro  
 100 105 110  
 Arg Phe Glu Phe Ser Arg Leu Val Phe Phe Arg Glu Ser Ala Cys Lys  
 115 120 125  
 Ser Tyr Ser Gln Phe Ala Phe Ala Leu Ser Met Val Ile Ala Glu Leu  
 130 135 140  
 Pro Tyr Ser Ile Leu Cys Ala Val Cys Phe Phe Leu Pro Leu Tyr Tyr  
 145 150 155 160  
 Ile Pro Gly Phe Gln Ala Ala Pro Ser Arg Ala Gly Tyr Gln Phe Leu  
 165 170 175  
 Met Val Leu Ile Thr Glu Leu Phe Ser Val Thr Leu Gly Gln Met Ile  
 180 185 190  
 Ser Ala Leu Thr Pro Asn Ser Phe Ile Ala Ser Gln Ile Asn Pro Pro  
 195 200 205  
 Ile Val Ile Ile Phe Ser Leu Phe Cys Gly Val Ala Ile Leu Arg Pro  
 210 215 220  
 Gln Met Pro Gly Phe Trp Arg Ala Trp Leu Tyr Gln Leu Asp Pro Phe  
 225 230 235 240  
 Thr Arg Leu Ile Ser Gly Met Val Thr Thr Lys Leu Pro Gly Arg  
 245 250 255

&lt;210&gt; 43876

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43876

Ser Arg Pro Trp His Ser Val Val Lys Ser Leu Ser Asn Asn Gln Leu  
 1 5 10 15  
 Ile Met Val Leu Met Glu Asn Cys Ser Ile Asn Lys Ile Pro Asp Ile  
 20 25 30  
 Phe Phe Val Ala Phe Gly Glu Val Glu His Ser Leu Gly Ile Ser Leu  
 35 40 45  
 Arg Gly Leu Pro Gln Ala Leu Ser Leu Trp Val Leu Ser Asn Ala Phe  
 50 55 60  
 Lys Tyr Ser Ser Tyr Ser Thr Cys Lys Phe Leu Asn Ala Leu Phe Ser  
 65 70 75 80  
 Leu Leu Arg Ser Arg Phe Gln Ser Cys Ser Arg Ala Gly Thr Tyr Pro  
 85 90 95  
 Gln Ser Gln Leu Ala Gln Ile Gln Leu Asp Ser Asn Pro Lys Ala Lys  
 100 105 110  
 Thr Thr Thr Val Thr Tyr Lys Ala Asn Ser Ala Arg Gln Ser Gln Leu  
 115 120 125  
 Glu Asp Ser Gln Cys Thr Gly  
 130 135

<210> 43877  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

<400> 43877  
 Leu Ala Leu Trp Ile Gly Pro Gly Thr Arg Ala Arg Leu Glu Ser Thr  
 1 5 10 15  
 Pro Glu Gln Thr Glu Glu Arg Ile Gln Lys Leu Ala Gly Ala Val Arg  
 20 25 30  
 Thr Ile Phe Glu Cys Ile Gly Glu Asp Pro Glu Arg Glu Gly Leu Arg  
 35 40 45  
 Glu Thr Pro Glu Arg Tyr Ala Lys Ala Met Leu Tyr Phe Thr Lys Gly  
 50 55 60  
 Tyr Glu Glu Asn Val Arg Asp Leu Val Asn Gly Ala Val Phe His Glu  
 65 70 75 80  
 Asp His Asp Glu Leu Val Ile Ala Lys Ala Phe His His Gly Val Pro  
 85 90 95  
 Gly Pro Arg Leu Cys  
 100

<210> 43878  
 <211> 181  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5), (103)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43878  
 Ser Ala Leu Leu Xaa Arg Pro Ser Arg Arg Leu Arg Tyr Pro Gly His  
 1 5 10 15  
 Glu Tyr Gly Arg Gly Ala Glu Ala Arg Gly Glu Gly Ala Ala Ala Arg  
 20 25 30  
 Gly Gly His Cys Leu Cys Ala Gly Trp Gly Gly Trp Arg Ala Tyr Gly  
 35 40 45  
 Arg His Pro Phe Ser Val Leu Val Pro Ala Val Val Asp Val Ala Lys  
 50 55 60  
 Arg Tyr Lys Ser Pro Met Thr Gly Gln Pro Ala Leu Val Val Ala Ala  
 65 70 75 80  
 Gly Gly Ile Asn Asp Gly Arg Ser Leu Ala Ala Ser Leu Met Leu Gly  
 85 90 95  
 Ala Ser Gly Val Trp Val Xaa Thr Arg Phe Val Ala Ser Glu Glu Ser  
 100 105 110  
 Gly Ala Ser Arg Met His Lys Glu Ala Val Val Arg Ala Leu Tyr Gly  
 115 120 125  
 Glu Thr His Arg Thr Leu Val Ser Gly Arg Pro Leu Arg Met Leu  
 130 135 140  
 Pro Asn Asp Tyr Ile Lys Asp Trp Glu Lys Arg Pro Gln Glu Ile Ala  
 145 150 155 160  
 Asp Leu Thr Ala Lys Gly Ile Val Pro Met Met His Asp Leu Glu Asn  
 165 170 175  
 Glu Lys Glu Val Asp  
 180

<210> 43879  
 <211> 180  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (76)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43879  
 Pro Pro Gly Gly Pro Pro Leu Leu Ser Ala Val Gly Asp Val Gly Gly  
 1 5 10 15  
 Phe Tyr His Ala Asp Leu Asp Lys Ala Pro Ala Gln Ser Phe His Asn  
 20 25 30  
 Pro Thr Tyr Gly Thr Thr Asn Gly Ile Asp Asn Ala Gly Asn Lys Pro  
 35 40 45  
 Ser Asn Leu Val Arg Ser Gly Ala Ser Asp Thr Leu Pro Thr Ile Ala  
 50 55 60  
 Met Phe Thr Asp Phe Gly Lys Thr Trp Ser Ala Xaa Tyr Ala Ala Ser  
 65 70 75 80  
 Ser Thr Thr His Thr Gly Gln Val Ala Leu Ser Ala Asp Ala Asp Thr  
 85 90 95  
 Val Leu Leu Met Asn Ser Asn Gly Ala Met Val Ser Lys Tyr Ser Ser  
 100 105 110  
 Thr Phe Ser Ala Val Ser Ser Leu Pro Ser Gly Ala Ala Ile Ala Ser  
 115 120 125  
 Asp Lys Ser Asn Asn Thr Val Phe Tyr Gly Gly Ser Ala Gly Ser Phe  
 130 135 140  
 Tyr Glu Ser Thr Asp Gly Ala Thr Ser Phe Thr Lys Thr Ala Ser Leu  
 145 150 155 160  
 Gly Ser Ser Thr Ala Val Lys Ala Ile Ser Val Asn Ser Arg Asp Lys  
 165 170 175  
 Arg Lys Arg Ala  
 180

<210> 43880  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 43880  
 Arg Ser Ala Val Arg His Ser Phe Gln Ile Leu Pro Leu Arg Arg Arg  
 1 5 10 15  
 Thr Cys Asp Ile Arg Pro Asp Ile Pro Thr Pro Arg Ile Ile Gly Thr  
 20 25 30  
 Leu Cys Ser Val Ala Asp Ile Ile Arg Ser Cys Leu Gly Pro Lys Ala  
 35 40 45  
 Met Leu Lys Met Leu Leu Asp Pro Met Gly Gly Ile Val Leu Thr Asn  
 50 55 60  
 Asp Gly His Ala Ile Leu Arg Glu Ile Glu Val Ser His Pro Ala Ala  
 65 70 75 80  
 Lys Ser Met Ile Glu Leu Ser Arg Thr Gln Asp Glu Glu Val Gly Asp  
 85 90 95  
 Gly Thr Thr Thr Val Ile Ile Leu Gly Ile Leu Tyr Cys Arg Ser Phe

## 19821

100 105 110

Thr

<210> 43881  
 <211> 149  
 <212> PRT  
 <213> A.fumigatus

<400> 43881  
 His Ser Ser Ala Gly Glu Ile Leu Ala Gln Ala Leu Pro Gln Leu Glu  
 1 5 10 15  
 Arg Asn Ile His Pro Val Val Ile Ile Gln Ala Phe Lys Arg Ala Leu  
 20 25 30  
 Ala Asp Ala Leu Ala Ile Val Glu Val Ser Leu Pro Val Asp Ile  
 35 40 45  
 Asp Asp Asp Lys Ala Met Tyr Thr Leu Ile Gln Ser Ser Ile Gly Thr  
 50 55 60  
 Lys Phe Val Ser Arg Trp Ser Glu Leu Met Cys Ser Leu Ala Leu Lys  
 65 70 75 80  
 Ala Val Arg Thr Val Ser Phe Asp Ala Gly Gly Gly Lys Arg Glu Val  
 85 90 95  
 Asp Ile Lys Arg Tyr Ala Arg Ile Glu Lys Ile Pro Gly Gly Gln Ile  
 100 105 110  
 Glu Asp Ser Glu Val Ile Asp Gly Val Met Ile Asn Lys Asp Ile Thr  
 115 120 125  
 His Pro Lys Met Arg Arg Arg Ile Leu Phe Thr Thr Arg Arg Gln Glu  
 130 135 140  
 Pro Arg Leu Gly Ser  
 145

<210> 43882  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 43882  
 Ser Asn Asn Leu Ser Arg His Val Lys Ala Ser Thr Ser Asn Ala Leu  
 1 5 10 15  
 Gln Arg Thr Phe Phe Pro Ser Asn Gln Tyr Ser Leu Tyr Thr Ile Glu  
 20 25 30  
 Pro Phe Met Leu Leu Phe Asn Phe Ala Glu Leu Gln Ser Tyr Ser Ser  
 35 40 45  
 Glu Trp Leu Leu Ser Leu Arg Ser Arg Gly Thr Pro Pro Asn Asp Leu  
 50 55 60

<210> 43883  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (144)  
 <223> Identity of amino acid sequences at the above locations are unknown.

## 19822

&lt;400&gt; 43883

Gln Arg Arg Leu His Arg Trp Gly Pro Ser Trp Arg Leu Pro Ser Ile  
 1 5 10 15  
 Ile Cys Gly Asp Cys Ala Asp Thr Asp Ser His Ser Pro Ala Cys Ser  
 20 25 30  
 Pro Ser Val Ala Val Gly Asn Gly Gly Gly Phe Ser Gly Val Ser Ser  
 35 40 45  
 Thr Pro Ile Asn Asn His Leu Gln Gly Thr Val Arg Thr Glu Ser Thr  
 50 55 60  
 Ser Gly Ile Gly Ile Ala Thr Phe Leu Ile Phe Ile Arg Ser Ile Phe  
 65 70 75 80  
 Arg Thr Ala Glu Leu Asn Gly Gly Phe Ser Ser Asp Leu Ala Asn Asp  
 85 90 95  
 Glu Val Ala Phe Met Ile Leu Glu Gly Ala Ser Met Val Ile Ala Cys  
 100 105 110  
 Gly Gly Met Ser Ile Phe His Pro Gly Met Ser Leu Lys Gly His Trp  
 115 120 125  
 Lys Asp Pro Thr Pro Ser Thr His Trp Gly Leu Asp Arg Leu Pro Xaa  
 130 135 140  
 Ile Ser Glu  
 145

&lt;210&gt; 43884

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43884

Ser Arg Arg Val Pro Ala Asn Ala Ser Cys Phe Asn Gln Ile Arg Ser  
 1 5 10 15  
 Ile Phe Arg His Ser Ser Ile Lys Tyr Arg Cys Ser Ser Pro Ile Asn  
 20 25 30  
 Leu Ala Arg Val Asp Val Asn Gly Ala Arg Tyr Phe Ile Cys Leu Thr  
 35 40 45  
 Ile Gly Pro Ala Phe Ile Thr Ala Ala Ile Tyr Leu Cys Phe Gly Arg  
 50 55 60  
 Val Ile Ile Leu Tyr Gly Glu Gly Phe Ser Arg Ile Lys Ser Arg Thr  
 65 70 75 80  
 Tyr Ala Ile Ile Phe Val Thr Cys Asp Leu Ile Cys Leu Ile Leu Gln  
 85 90 95  
 Ala Ala Gly Gly Ala Val Ile Ala Thr Ala Gly Arg Asp Gln Asp Gly  
 100 105 110  
 Leu Arg His Thr Gly Ile Asn Ile Met Ile Thr Gly Leu Ala Ala Gln  
 115 120 125  
 Val Ala Ser Leu Gly Ala Phe Met Ala Leu Ala Leu Asp Tyr Leu Trp  
 130 135 140  
 Arg Leu Arg Arg His Arg Gln Ser Gln Ser Cys Val Phe Ser Val Gly  
 145 150 155 160  
 Gly Cys Trp Gln Trp Arg Gly Phe Leu Trp Gly  
 165 170

&lt;210&gt; 43885

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

<220>  
 <221> UNSURE  
 <222> (70)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43885  
 Ser Gly Gln Thr Gly Leu Ala Ser Pro Pro His Leu Phe Phe Lys Ala  
 1 5 10 15  
 Glu Lys His Glu Ile Thr Lys Ala Met Asp Ser Thr Asp Ser Ser Trp  
 20 25 30  
 Glu Met Pro Phe Val Ile Asn Ile Trp Ser Val Gln Leu Ser Trp Gly  
 35 40 45  
 Asp Cys Arg Ala Ala Pro Pro Phe Ser Val Trp Ser Trp Arg Gly Lys  
 50 55 60  
 Asn Arg Gly Leu Ile Xaa Arg  
 65 70

<210> 43886  
 <211> 152  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (3)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43886  
 Ser Asp Xaa Pro Ser Cys Arg Leu Val Lys Ile Ala Pro Arg Cys Pro  
 1 5 10 15  
 Ile Val Ile Gln Leu Leu Met Thr Ala Ala Gly Ala Leu Asn Met Ser  
 20 25 30  
 Arg Ala Leu Gly Asp Leu Gln Tyr Lys Ala Pro Leu Ile Asn Ala Asp  
 35 40 45  
 Glu Pro Phe Ser Leu Glu Gln Glu Ile Ala Gly Phe Asn Pro Asp Lys  
 50 55 60  
 Glu Gln Gly Asp Leu Leu Ser Asn Arg Pro Ala Ile Ser Arg Ile Glu  
 65 70 75 80  
 Leu Lys Glu Asp Arg Lys Tyr Ile Val Ile Leu Thr Thr Asp Gly Val  
 85 90 95  
 Thr Asp Glu Met Glu Asp Arg Arg Ile Leu Asp Gln Val Val Ala His  
 100 105 110  
 Trp Asn Tyr Gly Thr Arg Ala Glu Gly Val Ala Gly Lys Ile Thr Thr  
 115 120 125  
 Glu Ala Thr Gly Gly Pro Met Ser Asp Asn Ala Thr Cys Ile Cys Ala  
 130 135 140  
 Phe Ile Tyr Gly Arg Gln Ala Ala  
 145 150

<210> 43887  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43887  
 Cys Asn Leu Tyr Met Cys Phe Tyr Leu Trp Glu Thr Gly Ser Met Ile

## 19824

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1             5             10             15
Gly Leu Ile Met Ala Trp Arg Ile Ile Pro Tyr Asp Val Phe Ser Ser
      20             25             30
Ser Gln Thr Met Asp Met Gly Ser Glu Tyr Thr Pro Ala Ser Tyr Cys
      35             40             45
Thr Ser Ser Gly Tyr Pro Tyr Ile Lys Leu Phe Leu Pro Met Lys Ser
      50             55             60
Met Gln Gln Ser Tyr Val Cys Tyr Gln Leu Arg Ser Gly Glu
65             70             75

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&lt;210&gt; 43888

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (11), (12), (13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43888

```

Ile His Phe Leu Ala Pro Gly Phe Leu Leu Xaa Xaa Xaa Trp Ile Val
1             5             10             15
Leu Pro Lys Val Asp Asp Ser Ser Asp Leu Ser Leu Glu Asp Asp Arg
      20             25             30
Ala Tyr Ser Ala Pro Val Lys Thr Gly Ser Gly Pro Ala Gly Ser Ala
      35             40             45
Arg Val Val Glu His Thr Ser Leu Gly Gly Ala Ile Met Lys Ala Ser
      50             55             60
Asp
65

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&lt;210&gt; 43889

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43889

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Val Ser Pro Gln Leu Ile Ile Ser Pro Asn Gly Thr Ser Gly Ile Asn
1             5             10             15
Phe Arg Gly Lys Met Ala His His Gln Gln Gly Asn Leu Gly Gly Gly
      20             25             30
Phe Ser Leu Phe Thr Gly Asn Cys Ser Gly Ala Glu Ala Cys Ile Gly
      35             40             45
Ile Gly Ala Ala Cys Ala Arg Gln Trp Pro Gln Lys Gly Phe His Leu
      50             55             60
Ala Leu Thr Tyr Ser Thr Asn Leu Glu Ala Arg Asn Met Leu Val Lys
      65             70             75             80
Glu Leu Arg Ser Ser Gln Pro Ala Ala Asp Gly Ala Asp Ala Leu Arg
      85             90             95
Ile Ser Ile His Gln Val Asp Val Ala Ser Ala Asp Gln Ile Gln Thr
      100             105             110
Met Phe Ala Gln Ile Asp Lys Glu His Gly Gln Arg Pro Asp Ile Leu
      115             120             125
Val Ser Asn Ala Gly Tyr Gly Lys Arg Ile Pro Gln Val Trp Asp Ile
      130             135             140

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## 19825

Ser Leu Glu Ala Phe Asp Tyr Thr Ile Asn Val Asn Leu Arg Ala Ser  
 145 150 155 160  
 Phe Ile Leu Val Lys Gly Val Val Asp His Met Arg Glu Gln Arg Trp  
 165 170 175  
 Gly Arg Ile Val Phe Met Ser Ser Ile Ala Gly Tyr Gly Gly Gly Ile  
 180 185 190  
 Asn Gly Cys Arg Lys Cys Met Asn Leu Tyr Pro Arg Pro Glu Ala  
 195 200 205

&lt;210&gt; 43890

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43890

Leu Ala Asp Ala Tyr Gln Ile Asp Tyr Ala Ala Ser Lys Gly Gly Met  
 1 5 10 15  
 Thr Gly Met Met Lys Asn Leu Ala Thr Arg Leu Ala Glu Tyr Asn Ile  
 20 25 30  
 Ser Val Asn Asp Val Ala Pro Ala Met Ile Gly Asp Thr Gly Met Ile  
 35 40 45  
 Pro Ser Ala Pro Val Phe Thr Thr Ser Ser Arg Thr Ala  
 50 55 60

&lt;210&gt; 43891

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43891

His Pro Thr Asn Met Gln Arg Ile Val Ala His Pro Gln Cys Tyr Leu  
 1 5 10 15  
 Ser Phe Gly Asp Leu Phe His Phe Leu Ser His Ser Ala Pro Asn Pro  
 20 25 30  
 Asp Phe Phe Leu Thr His Leu Val Gly Tyr Gln Ile Lys Tyr Leu Glu  
 35 40 45  
 His Cys Pro Leu His Pro Gly Pro Gly Ile Leu Glu Gly Gln Met Thr  
 50 55 60  
 Tyr Lys Ile Ile Asp Ser Arg Leu  
 65 70

&lt;210&gt; 43892

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43892

Leu Phe His Ser Thr Pro Leu His His Asn Tyr Thr Val Ser Leu Val  
 1 5 10 15  
 Asn His Val Ile Gln Tyr Glu Gln Tyr Gly His Pro Val Leu Lys Asn  
 20 25 30  
 Ile Ile His Pro Ser Arg Thr Leu Val Ala Ile Trp Ile Gly Ile Asn  
 35 40 45  
 Asp Ile Asn Asp Ser Ala Lys Tyr Ala Val His Phe Pro Thr Leu Tyr  
 50 55 60  
 Asn Arg Met Met Thr Thr Leu Phe Thr Ser Val His Thr Leu Tyr Asn

## 19826

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     | 70  |     | 75  |     | 80  |     |     |     |     |     |     |     |     |     |
| Leu | Gly | Tyr | Arg | Ser | Tyr | Leu | Phe | Met | Asn | Leu | Pro | Pro | Leu | Asp | Arg |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Pro | Ala | Asn | Gln | Ala | Arg | Ser | Asn | Pro | Ser | Pro | Asn | Ala | Thr | Gln |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Thr | Trp | Phe | Asn | Asn | Ala | Leu | Ser | Gln | His | Ala | Met | Ser | Phe | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Thr | His | Pro | Asn | Ala | Thr | Gly | Gln | Val | Phe | Asp | Ala | His | Thr | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Ser | Asn | Arg | Asn | Gly | His | Pro | Ala | Gln | Tyr | Gly | Ile | Pro | Gln | His |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Glu | Arg | Ile | Ser | Ala | Gln | Val |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 165 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43893

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43893

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Xaa | Phe | Phe | Ala | Gly | Glu | Tyr | Lys | Val | Pro | Leu | Tyr | Leu | Gln | Ser | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Lys | Glu | Ala | Ser | Pro | Met | Arg | Tyr | Gly | Val | Phe | Val | Leu | Pro | Val | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Leu | Ser | Glu | Ala | Phe | Ala | Gly | Ile | Ile | Thr | Gly | Ala | Leu | Ile | His | Arg |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Thr | Gly | Arg | Tyr | Arg | Glu | Leu | Ile | Trp | Leu | Gly | Met | Thr | Leu | Leu | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Gly | Asn | Gly | Leu | Tyr | Ile | His | Leu | Asp | Ala | Tyr | Ser | Ser | Leu | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Arg | Ile | Ile | Gly | Tyr | Gln | Phe | Leu | Ser | Gly | Ile | Gly | Ala | Gly | Phe | Leu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe | Glu | Pro | Pro | Ile | Ile | Ala | Ile | Gln | Ala | Met | Val | Ser | Gln | Asp | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Ala | Thr | Ala | Thr | Ala | Thr | Val | Gly | Phe | Ile | Arg | Asn | Leu | Ala | Thr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser | Ala | Ser | Ile | Val | Ile | Gly | Gly | Val | Val | Phe | Gln | Asn | Ser | Met | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Arg | Met | Lys | Pro | Thr | Leu | Leu | Ala | Ala | Gly | Met | Ser | Glu | Thr | Leu | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Glu | Gln | Met | Ser | Gly | Asp | Ser | Ala | Ala | Ala | Asn | Ile | Glu | Met | Ile | Lys |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Thr | Ile | Glu | Asp | Ala | Thr | Gln | Leu | Leu | Ala | Val | Lys | Glu | Ala | Phe | Ala |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| Ser | Ser | Leu | Arg | Asn | Met | Trp | Ile | Leu | Tyr | Thr | Cys | Met | Ser | Ala | Leu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly | Ile | Val | Ala | Gly | Val | Phe | Ile | Leu | Lys | Thr | Arg | Leu | Asn | Lys | Glu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| His | Val | Ala | Thr | Arg | Thr | Gly | Leu | Ile | Phe | Val | Pro | Arg | Gly | Asp | Lys |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Ile | Arg | Ala | Met | Tyr | Arg | Asp | Pro | Gln | Lys |     |     |     |     |     |     |

<210> 43894  
 <211> 216  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (6), (7), (9), (13), (36)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43894

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Cys | His | Ser | Gln | Xaa | Xaa | Glu | Xaa | Leu | Leu | Glu | Xaa | Asn | Glu | Ser |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Leu | His | Ile | Pro | Ala | Asp | Gln | Arg | Leu | Asn | Leu | Ser | Ala | Pro | Gly | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Ser | Tyr | Xaa | Pro | Thr | Pro | Glu | Arg | Ser | Pro | Met | Tyr | Val | Asp | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Thr | Ala | Lys | Ser | Ile | Leu | Lys | Asp | Ala | Lys | Ala | Gln | Met | Ala | Ala |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Ser | Met | Thr | Leu | Glu | Ala | Tyr | Arg | Thr | Leu | Gly | Asp | Asp | Ile | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Arg | Gly | Asn | Ala | Phe | Ala | Pro | Arg | Met | His | Tyr | Thr | Ala | Leu | Gln | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Pro | His | Thr | Ala | Val | Pro | Pro | Leu | Arg | Glu | Asp | Ser | Ser | Thr | Asn |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Ser | Leu | Glu | Glu | Lys | Leu | Gly | Tyr | Leu | Thr | Pro | Glu | His | Glu | Thr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Tyr | Tyr | Leu | Ser | Met | Asp | Ala | Lys | Leu | Gly | Asp | Glu | Ala | Ala | Ala |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Glu | Leu | Ser | Arg | Ile | Pro | Glu | Lys | Pro | Ser | Phe | Ala | Glu | Arg | Glu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Arg | Glu | Leu | Ala | Leu | Arg | Asn | Pro | Val | Ser | Val | Tyr | Asn | Trp | Leu | Arg |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Arg | Asn | Gln | Pro | His | Ile | Phe | Leu | Gln | Asp | His | Glu | Asn | Ala | Ser | Glu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Ser | Gly | Ser | Arg | Pro | Thr | Asn | Ala | Arg | Ala | Ser | Lys | Arg | Ser | Ser |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Arg | Gly | Trp | Lys | Phe | Arg | Val |     |     |     |     |     |     |     |     |
|     |     | 210 |     |     |     | 215 |     |     |     |     |     |     |     |     |     |

<210> 43895  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (136)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43895

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Ile | Val | Phe | Ala | Asn | Ser | Phe | Glu | Ser | Val | Lys | Gln | Leu | Trp | Ile |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |     |
| Lys | Asp | Gln | Ser | Ala | Leu | Ile | Ser | Arg | Pro | Thr | Phe | His | Thr | Phe | His |

## 19828

```

          20          25          30
Ser Val Val Ser Ser Ser Gln Gly Phe Thr Ile Gly Thr Ser Pro Trp
          35          40          45
Asp Glu Ser Cys Lys Arg Arg Arg Lys Ala Ala Ala Thr Ala Leu Asn
          50          55          60
Arg Pro Ala Val Gln Ser Tyr Met Pro Ile Ile Asp Leu Glu Ser Thr
65          70          75          80
Ala Ser Ile Lys Glu Leu Leu Lys Asp Cys Arg Asn Gly Ala Val Asp
          85          90          95
Ile Asn Pro Thr Ala Tyr Phe Gln Arg Phe Ala Leu Asn Thr Ser Leu
          100          105          110
Thr Leu Asn Tyr Gly Phe Arg Ile Glu Gly Asn Val Asp Asp Ala Leu
          115          120          125
Leu Arg Glu Thr Val Asp Val Xaa Leu Leu Ala Ser Gly
          130          135          140

```

&lt;210&gt; 43896

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (7), (13), (14), (20)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43896

```

Arg Arg Ser His Arg Val Xaa Tyr Ser Gln Leu Ile Xaa Xaa Ile Ile
1          5          10          15
Ala Ser Phe Xaa Arg Thr Asp Leu Ile Asp Arg Arg Asn Tyr Phe Met
          20          25          30
Ala Gln Thr Ile Val Leu Ala Val Phe Ala Ala Val Tyr Leu Leu Ile
          35          40          45
Arg Tyr Leu Asn Arg Thr Asp Ile Pro Lys Ile Lys Gly Leu Pro Glu
          50          55          60
Ile Pro Gly Val Pro Ile Phe Gly Asn Leu Leu Gln Leu Gly Thr Glu
65          70          75          80
His Ala Thr Val Ala Ala Arg Trp Ala Lys Lys Tyr Gly Pro Val Phe
          85          90          95
Gln Val Arg Met Gly Asn Lys Val Arg Asn Phe Val Pro Gly Leu Gly
          100          105          110
Leu Ser Cys His His Leu Arg Gly Gly Gly Phe
          115          120

```

&lt;210&gt; 43897

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (20), (23), (24)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43897

```

Phe Ala Asp Met Phe Gly Leu Asn Val Leu Arg Ala Glu Glu Asn Phe

```

## 19829

```

1           5           10           15
Ser Phe Gly Xaa Ala Ser Xaa Xaa Gln Lys Leu Lys Ser Thr Leu Asn
      20           25           30
Glu Thr Asn Leu Phe Ser Ala Glu Gly Asn Pro Val Asn Val Pro Ser
      35           40           45
Ser Gly Tyr Cys Ser Thr Asn Arg Ile Asn Pro Tyr Trp Lys Lys Phe
      50           55           60
Arg Phe Ser Arg Lys Gln Glu Pro Glu Ser Phe Glu Pro Leu Pro Lys
65           70           75           80
Leu Val

```

&lt;210&gt; 43898

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43898

```

His Glu Asp Val Val Glu Arg Leu Lys Arg Glu Ala Ser Asn Leu Ala
1           5           10           15
Arg Leu Arg His Pro Ser Ile Leu Gln Val Leu Glu Pro Val Glu Glu
      20           25           30
Thr Arg Gly Gly Gly Leu Met Phe Val Thr Glu Pro Ile Thr Thr Ser
      35           40           45
Leu Ala Ser Leu Leu Arg Glu Lys Asp Glu Gln Glu Arg Thr Ser Arg
      50           55           60
Ile Gly Ser Ser Ser Ser His Phe Met Val Glu Glu Ala Asp Gly Thr
65           70           75           80
Arg Arg Arg Arg Asp Leu Glu Ile Asp Glu Leu Glu Ile Gln Lys Gly
      85           90           95
Leu Leu Gln Val Ala Lys Gly Leu Glu Phe Leu His Glu Ser Ala Gly
      100          105          110
Leu Val His Gly Asn Leu Asn Pro Glu Ala Ile Tyr Ile Asn Ser Lys
      115          120          125
Ser Asp Trp Lys Ile Ser Gly Leu Gly Phe Ala Gly Pro Pro Asn Ser
      130          135          140
Thr Glu Ser Arg Ser Ser Leu Pro Pro Leu Ala Leu Ser Glu Val Leu
145          150          155          160
Tyr His Asp Pro Arg Leu Pro Gln Trp Ser Pro Ser
      165          170

```

&lt;210&gt; 43899

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (7)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43899

```

Cys Pro Ala Arg Leu Val Xaa Asn Ala Pro Ile Ser Arg Trp Arg Val
1           5           10           15
Tyr Lys Asn Pro Asn Lys Leu Asn Glu Ser Met Asp His Val Arg Lys
      20           25           30

```

| Variable            | Mean | SD   | Min | Max  | Median | Q1  | Q3   | Mode | Skewness | Kurtosis | Normality |
|---------------------|------|------|-----|------|--------|-----|------|------|----------|----------|-----------|
| Age                 | 35.2 | 12.5 | 18  | 65   | 32     | 28  | 38   | 35   | 0.15     | 3.2      | 0.05      |
| Gender              | 0.5  | 0.5  | 0   | 1    | 0.5    | 0.5 | 0.5  | 0.5  | 0.0      | 3.0      | 0.05      |
| Marital Status      | 0.7  | 0.5  | 0   | 1    | 0.7    | 0.7 | 0.7  | 0.7  | 0.0      | 3.0      | 0.05      |
| Education           | 12.5 | 2.5  | 9   | 16   | 12     | 11  | 13   | 12   | 0.1      | 3.5      | 0.05      |
| Income              | 1500 | 500  | 500 | 3000 | 1200   | 800 | 1800 | 1500 | 0.2      | 3.8      | 0.05      |
| Occupation          | 1.5  | 1.5  | 1   | 5    | 2      | 1   | 3    | 2    | 0.1      | 3.5      | 0.05      |
| Health Status       | 0.8  | 0.4  | 0   | 1    | 0.8    | 0.8 | 0.8  | 0.8  | 0.0      | 3.0      | 0.05      |
| Stress Level        | 3.5  | 1.5  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Life Satisfaction   | 4.0  | 1.0  | 1   | 5    | 4      | 3   | 5    | 4    | 0.0      | 3.0      | 0.05      |
| Resilience          | 3.0  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Optimism            | 3.5  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Emotional Stability | 3.0  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Self-Esteem         | 3.5  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Life Satisfaction   | 4.0  | 1.0  | 1   | 5    | 4      | 3   | 5    | 4    | 0.0      | 3.0      | 0.05      |
| Resilience          | 3.0  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Optimism            | 3.5  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Emotional Stability | 3.0  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |
| Self-Esteem         | 3.5  | 1.0  | 1   | 5    | 3      | 2   | 4    | 3    | 0.1      | 3.5      | 0.05      |

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<210> 43900
<211> 160
<212> PRT
<213> A.fumigatus
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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Cys | Pro | Gly | Arg | Ser | Ala | Gly | Glu | Asp | Gly | Ala | Gly | Asn | Ala | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Ser | Asp | Leu | Phe | Thr | Thr | Ala | Ser | Ala | Ser | His | Ile | Arg | Val | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Lys | Asp | Asp | Thr | Leu | Gly | Leu | Gly | Ala | Arg | Pro | Lys | Arg | Asp | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Leu | Asp | Gly | Pro | Thr | Gly | Leu | Asp | Ala | Phe | Lys | Gly | Leu | Leu | Gly | Arg |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Leu | Asn | Gly | Lys | Ser | Asp | Thr | Gln | Leu | Glu | Ala | Glu | Gln | Gln | Lys | Arg |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Asp | Ala | Lys | Leu | Ala | Arg | Tyr | Ala | Ala | Thr | Lys | Trp | Gln | Thr | Val |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Phe | Ile | Ser | Gly | Gly | Leu | Leu | Val | Gln | Glu | Lys | Asp | Asn | Ala | Thr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Ser | Pro | Ala | Ser | Gln | Asp | Leu | Arg | Val | Asp | Phe | Pro | Arg | Glu | Thr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser | Ser | Asn | Glu | His | Glu | Asn | Gly | Met | Phe | Lys | Thr | Glu | Pro | Met | Asp |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Tyr | Ser | His | Gln | Glu | Gly | Cys | Ala | Thr | Ala | Arg | Glu | Glu | Glu | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |

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<210> 43901
<211> 70
<212> PRT
<213> A.fumigatus
```

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Trp | Arg | Ser | Phe | Asp | Val | Asp | Gly | Pro | Phe | Glu | Ala | Ser | Arg | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val | Pro | Leu | Ser | Phe | Ala | Thr | Ala | Thr | Arg | Thr | Phe | Val | Glu | Val | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Ala | Val | Ser | Val | Ser | Ser | Leu | Ser | Gln | Ser | Pro | Ile | Phe | Leu | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

## 19831

Phe Gly Ile Phe Ser Cys Phe Phe Ser Arg Asp Phe Leu Gly Leu Met  
 50 55 60  
 Ser Ile Ser Phe Pro Phe  
 65 70

<210> 43902  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (12), (28), (108)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43902  
 Lys Met Val Pro Arg Ser Phe Gln Phe Ala Gly Xaa Lys Asp Gly Arg  
 1 5 10 15  
 Gly Val Thr Val Gln Arg Ala Cys Val Ser Arg Xaa Phe Ala Asp Arg  
 20 25 30  
 Phe Ala Lys Leu Asn Ser Ala Leu Arg Asn Ser Ala Val Gly Asp Tyr  
 35 40 45  
 Glu Tyr Cys Arg His Gly Leu Glu Leu Gly Asp Leu Lys Gly Asn Glu  
 50 55 60  
 Phe Val Ile Thr Leu Arg Glu Cys Ile Ile Pro Gly Val Asp Leu Gln  
 65 70 75 80  
 Asn Pro Glu Asp Ala Val Ala Thr Ala Lys Glu Phe Val Gly Ser Ala  
 85 90 95  
 Leu Arg Asn Leu Arg Glu Arg Gly Tyr Phe Asn Xaa  
 100 105

<210> 43903  
 <211> 148  
 <212> PRT  
 <213> A.fumigatus

<400> 43903  
 Tyr Gly Leu Gln Arg Phe Gly Thr Phe Ala Thr Arg Thr Asp Met Val  
 1 5 10 15  
 Gly Val Lys Met Leu Gln Gly Asp Phe Lys Gly Ala Cys Asp Ala Ile  
 20 25 30  
 Leu His Tyr Ser Pro His Ile Leu Ala Ala Ala Gln Glu Gly Asn Ser  
 35 40 45  
 Ser Ser Met Ile Ser Ser Asp Asp Lys Ala Arg Ala Glu Ala Ile His  
 50 55 60  
 Ile Phe Gln Thr Thr Gly Lys Val Ser Glu Ala Val Glu Lys Leu Pro  
 65 70 75 80  
 Arg Lys Phe Ser Ala Glu Asn Asn Leu Ile Arg His Leu Gly Arg Ser  
 85 90 95  
 Gln Asn Asp Tyr Leu Gly Ala Leu Gln Thr Ile Pro Arg Asn Leu Arg  
 100 105 110  
 Leu Met Tyr Val His Ala Tyr Gln Ser Leu Val Trp Asn Phe Ala Val  
 115 120 125  
 Gly Glu Arg Trp Arg Leu Tyr Val Ser Pro Pro Gly Gly Lys Asp Arg  
 130 135 140  
 Arg Leu Gly Ile

145

<210> 43904  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<400> 43904  
 Glu Arg Asp Gly Pro Gly Tyr Phe Tyr Ser Arg Ser Ile Pro Ser Ile  
 1 5 10 15  
 Ser Tyr Phe Ser Ser Val Val Ile Ile Gly Val Gly Ala Ala Gly Pro  
 20 25 30  
 Arg Gln Val Ser Ser Pro Gln Lys Glu Asn Ala Glu Val Met Thr Leu  
 35 40 45  
 Ile Ala Ala Phe Asn Thr Pro Pro Lys Lys Gln Leu Gly Phe Arg Thr  
 50 55 60  
 Asp Thr Ala Asp Pro Ala Trp Arg Asp Asp Asp Asn Asp Asp  
 65 70 75

<210> 43905  
 <211> 149  
 <212> PRT  
 <213> A.fumigatus

<400> 43905  
 His Thr Ala Leu Ile Met Thr Leu Ser Gly Cys Val Val Val Val Ala  
 1 5 10 15  
 Gly Ala Ser Lys Gly Ile Gly Arg Ala Ile Val Leu Arg Ala Ala Ala  
 20 25 30  
 Asp Gly Ala Ser Val Val Ile Asn Tyr Met Ser Asp Val Lys Gly Ala  
 35 40 45  
 Asn Ala Leu Val Ala Gln Ile Gly Ser Asp Arg Ala Ile Ala Val Arg  
 50 55 60  
 Ala Asp Ile Ser Lys Thr Ala Glu Val Asp Glu Leu Ile Glu Ala Thr  
 65 70 75 80  
 Val Ala Arg Phe Gly Arg Ile Asp Val Leu Val Pro Asn Ala Ala Tyr  
 85 90 95  
 Val Pro Glu Ser Asn Leu Arg Ser Val Thr Glu Glu Asp Phe Asp Arg  
 100 105 110  
 Ala Phe Ala Val Asn Val Lys Gly Pro Cys Phe Leu Ala Lys Ala Gly  
 115 120 125  
 Ala Pro Arg Ile Ser Leu Glu Phe Gly Thr His Ala Glu Ile Leu Pro  
 130 135 140  
 Ser Ser Gln Ile Ala  
 145

<210> 43906  
 <211> 279  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222>  
 (1), (2), (3), (12), (13), (14), (16), (17), (18), (19), (20), (21), (22), (23), (24), (27), (64)  
 ), (80), (204)



## 19833

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43906

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Xaa Xaa Xaa Lys Lys Lys Lys Lys Lys Lys Lys Xaa Xaa Xaa Lys Xaa
1          5          10          15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Leu Xaa Leu Ser Leu Ser Leu
20          25          30
Pro Leu Ser Thr Val Arg Val Arg Gln Phe Thr Ile Gly Cys Val Phe
35          40          45
Ser Ser Asp Asp Tyr Gly His Arg Cys Leu Gly Arg Ile Pro Ser Xaa
50          55          60
Gln Arg Gln Leu Gln Phe Asp Arg Cys Pro Arg Ser His His Phe Xaa
65          70          75          80
Gln Val Leu Cys Ser His Pro Pro Leu Pro Leu Pro Leu Pro Arg Lys
85          90          95
Ser Lys Ala Leu His Thr Phe Glu Arg Thr Gln Val Pro Ile Tyr Gln
100         105         110
His Asn Ser Phe Leu Phe Ser Val Ile Ser Gly Thr Thr Ser Ile Ile
115         120         125
Gly Ala Thr Glu Thr Thr Thr Leu Ser Leu Asp Pro Ile Ile Trp Gly
130         135         140
Ser Ser Thr Tyr Ser Pro Pro Val Glu Thr Arg Ser Leu Gly Gly Ser
145         150         155         160
Thr Thr Val Ile Gly Gly Thr Thr Leu Pro Pro Thr Pro Ile Thr Val
165         170         175
Thr Pro Asn Pro His Pro Thr Thr Thr Pro Asp Pro Gly Ser Thr Asp
180         185         190
Pro Ala Leu Asn Ser Lys Lys Pro Ser Trp Thr Xaa Gly Lys Pro Pro
195         200         205
Thr Pro Thr Ala Glu Pro Gly Cys Pro Gly Cys Gly Thr Arg Cys Glu
210         215         220
Ser Leu Cys Phe Leu Cys Cys Leu Gly His Val Lys Arg Pro Trp Arg
225         230         235         240
Leu Thr Gln Leu Ser Pro His Leu Gly Leu Leu Phe Cys Asn Pro Asp
245         250         255
Cys Pro Phe Cys Pro Pro Gly His Leu Ser Ser Leu Ser Arg Arg His
260         265         270
Gly Asn Leu Thr Pro Pro Pro
275

```

<210> 43907

<211> 83

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (27), (43)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43907

```

Gly Tyr Ala Ser Ser Leu Leu Asp Ala Ser Phe Pro Val Thr Thr Thr
1          5          10          15
Ala Ile Asp Val Trp Gly Val Ser Leu Leu Xaa Ser Ala Ser Ser Ser
20          25          30
Leu Thr Gly Ala Pro Val Pro Ile Ile Leu Xaa Lys Phe Cys Ala Ala

```

## 19834

```

          35          40          45
Thr Pro Leu Tyr Arg Tyr Arg Tyr Pro Val Ser Arg Lys Pro Cys Ile
   50          55          60
Leu Leu Arg Gly Pro Lys Phe Leu Phe Thr Asn Thr Thr His Phe Ser
   65          70          75          80
Ser Ala Ser

```

<210> 43908  
 <211> 142  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43908
His Leu Val Glu Tyr Ile Gln Leu Asp Gln Met Arg Met Glu Lys Gln
1          5          10          15
Asn Ile Pro Ser Ala Ala Arg Ser Lys Val Asn Ile Arg Phe Arg Asn
   20          25          30
Tyr Ala Thr Asp Val Asp Glu Ala Lys Arg Lys Leu Lys Ser Leu Ser
   35          40          45
Asp Asp Arg Lys Ala Leu Phe Gly Asp Arg Tyr Thr Asp Glu Pro Gln
   50          55          60
Asp Glu His Leu Glu Gln Arg Gln Gln Leu Leu Ser Gly Thr Glu Arg
   65          70          75          80
Leu Glu Arg Ser Ser Ala Arg Leu Gln Glu Ser Gln Arg Ile Ala Leu
   85          90          95
Glu Thr Glu Asp Ile Gly Arg Asn Thr Leu Ala Asp Leu Tyr Gln Gln
  100          105          110
Arg Gln Thr Ile Glu His Ala Arg Ala Gly Leu Gln Gln Ser Glu Gly
  115          120          125
Tyr Val Asp Leu His His Thr Ala Glu Gly Pro Cys Lys Arg
  130          135          140

```

<210> 43909  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (13), (14), (27)  
 <223> Identity of amino acid sequences at the above locations are unknown.

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<400> 43909
Ala Val Arg Cys Gln Thr Val Ile Phe Gln Glu Ile Xaa Xaa Leu Cys
1          5          10          15
Phe Ser Glu Leu Tyr Leu Ser Lys Leu Asp Xaa Lys Gln Lys Ala Phe
   20          25          30
His Phe Leu Gly Lys His Ile Leu Phe Ser Ser Glu Pro Arg Lys Thr
   35          40          45
Pro Lys Arg Met Lys Gly Phe Phe Ser Glu Gln Glu Phe
   50          55          60

```

<210> 43910  
 <211> 169  
 <212> PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43910

Gly Gly Ala Asp Pro Ser Thr Pro Ser Cys Lys Asn Ser Pro His Val  
 1 5 10 15  
 His Met Leu Asp Ile Glu Cys Phe Thr Tyr Leu Asn Arg Ala Leu Glu  
 20 25 30  
 Ser Ser Ile Ser Pro Ile Val Ile Leu Ala Ser Asn Arg Gly His Thr  
 35 40 45  
 Val Ile Arg Gly Thr Asp Asp Ile Thr Ala Ala His Gly Ile Pro Pro  
 50 55 60  
 Asp Leu Leu Ala Arg Leu Leu Ile Ile Pro Thr His Pro Tyr Thr Pro  
 65 70 75 80  
 Asp Glu Ile Lys Thr Ile Ile Arg Leu Arg Ala Lys Thr Glu Gly Leu  
 85 90 95  
 Asn Ile Thr Asp Pro Ala Leu Asp Lys Val Ala Asp His Gly Ser Lys  
 100 105 110  
 Val Ser Leu Arg Tyr Ala Leu Gln Leu Leu Thr Pro Ala Ser Ile Leu  
 115 120 125  
 Ala Arg Val Asn Gly Arg Pro Gly Gly Ile Glu Glu Ala Asp Ile Ala  
 130 135 140  
 Glu Cys Glu Asp Leu Phe Leu Asp Ala Lys Arg Ser Ala Ala Ile Val  
 145 150 155 160  
 Ser Gln Asp Ser Glu Lys Phe Leu Ser  
 165

&lt;210&gt; 43911

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (133), (136)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43911

Gly Lys Thr Arg Arg Trp Ile Glu His Asn Ala Asn Ala Ala Leu Leu  
 1 5 10 15  
 Thr Arg Asn Asn Asp Gly Lys Phe Gly Thr Trp Trp Gly Arg Arg Tyr  
 20 25 30  
 Arg Val Leu Asp Asp Ala Ile Ile Asp Gln Ser Pro Leu Pro Pro Gly  
 35 40 45  
 Ala Val Asp Tyr Lys Asn Tyr Asp Asn Arg Gly Asp Gly Trp Ser Lys  
 50 55 60  
 Glu Gln Thr Gly Ala Leu Arg Gly Arg Ala Ser Trp Thr Ala Ser Ser  
 65 70 75 80  
 Ala Gly Thr Pro Glu Ser Ser Asp Gln Arg Thr Gly Ser Arg Glu Thr  
 85 90 95  
 Trp Ile Trp Thr Asn Arg Pro Thr Leu Ala Glu Val Arg Leu Met Asp  
 100 105 110  
 Tyr Asn Asp Arg Gly Arg Gly Arg Thr Val Glu Thr Gln Ser Gly Gly  
 115 120 125  
 Ile Ala Val Leu Xaa Pro Gly Xaa Pro Pro  
 130 135

<210> 43912  
 <211> 143  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (139), (140)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43912  
 Pro Arg Asp Pro Gly Ser Leu Val Val Lys Thr Val Asp Asp Asp Val  
 1 5 10 15  
 Lys Ser Ala Leu Glu Gly Leu Gln Asp Gly Gly Leu Val Gln Leu Val  
 20 25 30  
 Arg Ser Leu Glu Cys Gly Ala Glu Phe Gly Ser Leu Lys Asp Phe Ile  
 35 40 45  
 Ile Ser Leu Ile Val Asn Tyr Glu Phe Cys Glu Ile Gln Ala Ile Asp  
 50 55 60  
 Ile Pro Ser Glu Thr Phe Lys Leu Ala Ala Ala Glu Ser Gly Ile Asp  
 65 70 75 80  
 Ala Asn Ser Val Gln Thr His Ile Ser Ser Ser Ser Pro Arg Tyr Thr  
 85 90 95  
 Phe Tyr His Tyr Pro Glu Thr Asp Thr Val Phe Phe Ile Tyr Thr Cys  
 100 105 110  
 Pro Ser Gly Ser Ser Ile Lys Glu Arg Met Leu Tyr Ala Ser Ser Arg  
 115 120 125  
 Met Tyr Ala Leu Arg Val Ala Asp Glu Gln Xaa Xaa Gly Gly Gly  
 130 135 140

<210> 43913  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (1)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43913  
 Xaa Leu Lys Ala Asn Asn Thr Ser Phe Thr Met Ser Val Trp Asn Pro  
 1 5 10 15  
 Asp Asn Ile Arg Asp Val Ala Glu Ser Val Gly Ile Val Asn Leu Ser  
 20 25 30  
 Asn Asp Val Thr Glu Asn Leu Ala Arg Asp Val Glu Tyr Arg Ile Ala  
 35 40 45  
 Gln Val Leu Glu Glu Ala Leu Lys Phe Met Arg His Ser Arg Arg Thr  
 50 55 60  
 Leu Leu Thr Thr Gln Asp Val Ala Gln Ala Leu Arg Val Leu Asp Val  
 65 70 75 80  
 Glu Pro Leu Tyr Gly Tyr Glu Thr Thr Arg Pro Leu Arg Phe Gly Glu  
 85 90 95  
 Ala Ser Leu Gly Pro Gly Gln Pro Leu Phe Tyr Val Glu Asp Glu Glu  
 100 105 110  
 Val Asp Phe Glu Lys Leu Ile Asn Ala Pro Leu Pro Lys Val Pro Arg

## 19837

115                      120                      125  
 Glu Ile Ser Phe Thr Gly Trp Cys Tyr Ser Cys Arg Phe  
 130                      135                      140

<210> 43914  
 <211> 103  
 <212> PRT  
 <213> A.fumigatus

<400> 43914  
 Leu Met Arg His Cys Pro Arg Cys Arg Gly Arg Phe Leu Leu Leu Val  
 1                      5                      10                      15  
 Gly Ala Thr Ala Val Val Phe Arg Ser Val Phe Cys Ala Asp Trp Phe  
 20                      25                      30  
 Tyr Cys Thr Ala His Trp Leu Ala Val Glu Gly Val Gln Pro Ser Ile  
 35                      40                      45  
 Pro Gln Asn Pro Thr Ala Ala Asp Ser Arg Asn Leu Glu Leu Thr Ala  
 50                      55                      60  
 Lys Gly Pro Asn Ala Asn Ser Thr Leu Ala Ala Met Ser Gly Thr Gly  
 65                      70                      75                      80  
 Asp Val Ala Val Asn Pro Leu Val Ser Leu His His Arg Gly Arg Lys  
 85                      90                      95  
 Val Arg Ser Asn Ala Phe Arg  
 100

<210> 43915  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<400> 43915  
 Ile Asn Arg Ser Phe Leu Ile Gln Arg Leu Lys Val Gly Thr Glu Leu  
 1                      5                      10                      15  
 Ile Ile Arg Leu Lys Trp Gly Gln Thr Glu Tyr Lys Gly Lys Leu Glu  
 20                      25                      30  
 Ser Ile Asp Ser Tyr Met Asn Val Leu Leu Arg Asp Thr Glu Glu Phe  
 35                      40                      45  
 Ile Asp Gly Lys Asn Thr Gly Thr Leu Gly Leu Val Leu Ile Arg Tyr  
 50                      55                      60  
 Val Ser Asp Cys Gly Val Pro Ile Thr Phe Ala Glu His Val Leu Thr  
 65                      70                      75                      80  
 Asp Thr Asn Gln Val  
 85

<210> 43916  
 <211> 167  
 <212> PRT  
 <213> A.fumigatus

<400> 43916  
 Lys Gln His Leu Ser Glu Pro Val Ala Pro Gln Leu Arg Glu Arg Pro  
 1                      5                      10                      15  
 Val Ser Arg Val Pro Glu Leu Ser Tyr Ser Ser Ile Arg Ser Val Glu  
 20                      25                      30  
 Thr Leu Pro Val Gly Ala Thr Ser Pro Val Ala Val Val Ser Gly Leu  
 35                      40                      45

## 19838

Gln Ile Ala Asp Glu Asn Met His Pro Ala His Leu Arg Asp Ala Val  
 50 55 60  
 Gln Asp Lys Arg Pro Thr Asp Ser Met Ser Ile Ala Lys Asp Ile Pro  
 65 70 75 80  
 Ser Asp Asp Ala Ala Ala Asp Ala Glu Asp Leu Lys Ser Gly Ala Ala  
 85 90 95  
 Leu Pro Leu Gly Thr Ile Ser Gly Asn Ala Val Thr Arg Gly Arg Arg  
 100 105 110  
 Arg Gln Ser Asn Gln Ala Asp Ser Gly Ala Gln Thr Ile Leu Ser Ser  
 115 120 125  
 Lys Gln Ile Asp Gln Ile Leu Met Glu Arg Val Ser Ser Arg Pro Leu  
 130 135 140  
 Ser Pro Pro Asp Ser Asp Lys Ala Lys Glu Ala Gly Pro Ser Pro Phe  
 145 150 155 160  
 Ala Thr Pro Lys Ala Arg Pro  
 165

&lt;210&gt; 43917

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (8), (171)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43917

Pro Ser Val Ser Cys Ala Ile Xaa Ser Pro Ser Pro Val Asn Thr Pro  
 1 5 10 15  
 Pro His His Gly Ser Asp Ile Val Ser Pro Asn Thr Ala Thr Arg Gly  
 20 25 30  
 Glu Met Tyr Pro Gln Gln Pro Gln Ala Gln Asn Pro Asp Arg Ala Ala  
 35 40 45  
 His Leu Leu Asn Leu Leu Lys Phe Asn Gln Gly Ala Ala Ala Ala Pro  
 50 55 60  
 Ser Gln Gln Gln Pro Thr Ala Val Gly Met Glu Gln Pro Arg Ser Pro  
 65 70 75 80  
 Leu Thr Gln Glu Thr Gly Phe Glu Gly Val Phe Arg Ser His Thr Arg  
 85 90 95  
 Asn Ile Ser Ala Ser Asp Leu Val Ala Ser Leu Phe Gly Arg Gln Ala  
 100 105 110  
 Gln Ala Pro Pro Ser Ala Ala Thr Pro Pro Met Met Pro Asn Pro Ser  
 115 120 125  
 Gln Phe Ala Gln Pro Gly His Ser Gly Val Gly Glu Ser Ser Leu Ser  
 130 135 140  
 Ala Ala Pro Thr Ala Glu His Thr Gln Glu Met Leu Leu Arg Leu Leu  
 145 150 155 160  
 Asn Arg Pro Ser Pro Ser Gln Asp Val Pro Xaa Ala His Glu Ala Ala  
 165 170 175  
 Arg Ser Ala Leu Gly  
 180

&lt;210&gt; 43918

&lt;211&gt; 108

&lt;212&gt; PRT

<213> A.fumigatus

<400> 43918

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Lys | Leu | Ala | Ala | Val | Asp | Arg | Cys | Lys | Arg | Glu | Leu | Leu | Gln | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Asp | Val | Leu | Glu | Ile | Arg | Leu | Ser | Gly | Arg | Tyr | Gly | Gly | Gly | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Glu | Tyr | Leu | Ala | Gly | Gln | Gly | Gln | Gly | Lys | Tyr | Ser | Ile | Ala | Asp |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Asn | Ala | Trp | Ala | Trp | Val | Arg | Asn | Ile | Arg | Arg | Ile | Gly | Leu | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Glu | Asn | Glu | Leu | Ala | Pro | Leu | Pro | His | Leu | Gln | Gln | Trp | Val | Asp | Arg |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ile | Ala | Ala | Arg | Pro | Ala | Val | Glu | Arg | Gly | Leu | Gly | Glu | Trp | Tyr | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Asp | Val | His | Pro | Asp | Leu | Leu | Leu | Glu | Thr | Ala |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

<210> 43919

<211> 134

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (129), (131), (132), (133)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43919

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Gln | Glu | Asp | Lys | Gln | Glu | Lys | Val | Glu | Ala | Pro | Lys | Gln | Asp | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Ala | Ser | Leu | Phe | Gly | Thr | Thr | Ser | Leu | Thr | Ser | Ser | Val | Ser | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn | Pro | Asn | Pro | Phe | Ser | Ser | Asn | Thr | Ser | Ser | Gly | Phe | Pro | Ser | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Phe | Ala | Ala | Pro | Thr | Ala | Ala | Pro | Thr | Pro | Ala | Lys | Glu | Thr | Ser |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Thr | Thr | Gln | Ser | Thr | Thr | Thr | Leu | Ser | Glu | Thr | Phe | Ala | Asp | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Val | Arg | Val | Ser | Ser | Pro | Pro | Pro | Glu | Thr | Met | Pro | Pro | Glu | Ala | Ala |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Pro | Ala | Ala | Pro | Trp | Pro | Glu | Lys | Ser | Ala | Phe | Pro | Ala | Pro | Tyr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Pro | Gln | Phe | Tyr | Leu | Asp | Ala | Glu | Tyr | Glu | Thr | Leu | Ser | Arg | Pro | Pro |
|     |     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Xaa | Tyr | Xaa | Xaa | Xaa | Pro |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43920

<211> 76

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (64), (65), (67)

19840

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43920

```

Phe Met Gly Ile Ile Trp Leu Lys Leu Ser Gln Asp Ser Ser Gly Thr
1           5           10           15
Ile Asp Arg Asp Glu Phe Leu Ser Leu Pro Gln Val Ser Ser Asn Pro
          20           25           30
Leu Ala Thr Arg Tyr Val Arg Gln Ala Ile Asp Gly Gly Thr Val Glu
          35           40           45
Glu His Gln Asp Val Gly Asp Lys Leu Thr Val Ala Glu Gln Asp Xaa
          50           55           60
Xaa Phe Xaa Ser Asp Asp Gly Pro Tyr Arg Arg Lys
65           70           75

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<210> 43921

<211> 209

<212> PRT

<213> A.fumigatus

<400> 43921

```

Thr Asp Ser Ser Trp Ser Trp Arg Ile Pro Ser Val Leu Gln Cys Val
1           5           10           15
Phe Ser Leu Ile Gln Ala Val Leu Ser Leu Leu Ala Pro Glu Ser Pro
          20           25           30
Arg Trp Leu Ile Tyr His Gly Arg Arg Glu Glu Ala Leu Ala Met Leu
          35           40           45
Ala Lys Tyr His Ala Asp Gly Asp Thr Ser Ser Arg Leu Val Arg Phe
          50           55           60
Glu Met Ala Glu Ile Thr Ala Thr Leu Glu Met Glu Lys Ile Gln Arg
65           70           75           80
Ala Ser Arg Trp Thr Glu Trp Val Ala Thr Arg Gly Asn Arg His Arg
          85           90           95
Leu Phe Leu Ala Leu Tyr Ile Pro Ala Met Leu Gln Trp Ala Gly Asn
          100          105          110
Gly Leu Thr Ser Tyr Tyr Leu Ser Lys Val Leu Asn Thr Ile Asn Val
          115          120          125
Thr Asp Pro His Val Gln Leu Ile Ile Asn Ala Cys Leu Ser Val Trp
          130          135          140
Ser Phe Leu Thr Ala Ala Phe Phe Ala Thr Leu Val Asp Arg Ala Gly
          145          150          155          160
Arg Arg Arg Leu Phe Leu Gly Gly Met Gly Gly Met Gly Val Ser Tyr
          165          170          175
Val Ile Trp Thr Val Cys Ser Ala Leu Asn Glu Glu His His Phe Gln
          180          185          190
Asp Lys Gly Tyr Gly Leu His Arg Gly Ala Gly Arg Thr Ala Pro Thr
          195          200          205
Gly

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<210> 43922

<211> 152

<212> PRT

<213> A.fumigatus

<400> 43922

Ser Arg Gly Glu Glu Thr Val His Asn Gln Glu Pro Gly Glu Leu Pro



## 19841

```

1           5           10           15
Ser His Asp Ala Pro Ala Pro Asp Met Asp Pro Glu Asp Gln Gly Trp
      20           25           30
Ile Arg Glu Phe Ala Lys Phe Lys Lys Asp Thr Lys Val Lys Ala Ala
      35           40           45
Pro Thr Ala Pro Pro Ser Ile Val Pro Ser Glu His Arg Ser Thr Leu
      50           55           60
Ala Ser Thr Met Phe Thr Val Gly Gly Thr Pro Ile Arg Arg Lys Lys
65           70           75           80
Arg Lys Gly Ala Leu Thr Asn Pro Ser Ala Tyr Ser Met Thr Ser Ser
      85           90           95
Ala Leu Ala Arg Thr Glu Gly His Arg Leu Leu Asp Asp Arg Phe Asp
      100           105           110
Thr Ile Glu Ala Leu Tyr Ala Leu Asp Glu Asp Gly Glu Glu Tyr Asp
      115           120           125
Asp Asn Met Ser Met Val Ser Gly Met Thr Gly Met Thr Gly Ile Ser
      130           135           140
Thr Ala Ser Ser Gln Ala Pro Ser
145           150

```

<210> 43923  
 <211> 129  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43923
Thr Ala Arg Val Gln Lys Arg Asp Leu Phe Asn Ala Phe Arg Ala His
1           5           10           15
Ser Ser Ala Phe Asp Gly Thr Pro Leu Gly Gln His Leu Arg Arg Ser
      20           25           30
Ser Pro Pro Pro Asp Phe Leu Ala Gln Ile Met Pro Ala Leu Ala Glu
      35           40           45
Val Val Asn Arg Ala Ser Asp Ala Val Gly Ala Leu Asn Ser Ala Ala
      50           55           60
Glu Glu Leu Ser Ser Met Gly Phe Ser Gly Thr Thr Val Asn Asp Ile
65           70           75           80
Ile Ser Glu Met Arg His Arg Phe Arg Ser Ala Arg Leu Gly Leu Lys
      85           90           95
Arg Ala Leu Pro Gly Glu Thr Ala Asn Val Gly Leu Glu Asp Gly Ser
      100           105           110
Ala Thr Leu Ala Ala Leu Val Asn Arg Val Lys Leu Leu Val Lys Asp
      115           120           125
Leu

```

<210> 43924  
 <211> 129  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43924
Ile Arg Glu Leu Gln Glu Ile Cys Asp Arg Ser Ser Asp Glu Glu Ser
1           5           10           15
Val Thr Asp Ala Thr Ser Thr Asn Ile Gly Pro Ile Ser Lys Leu Ser
      20           25           30
Val Gly Ile Leu Gly Thr His Gln Ser Ala Gly Ser Asp Thr Ser Gly

```

## 19842

```

      35              40              45
Ser  Gln Tyr  Leu  Gln Arg  Leu  Gln Val  Gln Ala  Leu Trp His  Val Tyr
    50              55              60
Arg  Glu Asn Val  Ala  Pro  Met  Ile Ala  Ile Leu His  Thr Pro Ser  Ile
65              70              75              80
Glu  Ala Met  Leu  Arg  Glu  Gly Tyr  Ala Asn Lys Asp Ser  Ile Leu Gln
      85              90              95
Pro  Glu Gln Glu  Ala  Leu  Ile Leu Ala  Ile Cys Phe Ala Ala Val Val
      100             105             110
Ser  Met Thr  Pro  Gln Gln Cys Leu Ser  Ile Leu Gly Gly Gly His Asp
      115             120             125
Ala

```

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<210> 43925
<211> 74
<212> PRT
<213> A.fumigatus

```

```

<400> 43925
Cys Val Pro Arg  Ile Pro Thr Glu Ser Leu Asp Met Gly Pro Ile Leu
1              5              10              15
Val Leu Val Ala Ser Val Thr Leu Ser Ser Ser Glu Asp Leu Ser Gln
      20              25              30
Ile Ser Cys Asn Ser Arg  Ile Tyr Pro Leu Ser Ala Thr Gln Asn Leu
      35              40              45
Tyr Gly Asn Asn Thr His Thr Leu Ser Pro Arg Leu Thr Val Phe Thr
      50              55              60
Tyr Gly Gly Arg Thr Ala Pro His Val Arg
65              70

```

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<210> 43926
<211> 122
<212> PRT
<213> A.fumigatus

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```

<400> 43926
Leu Asn Arg Lys Glu Gln Asp Arg Leu Ile Gly Tyr Ala Val Gly His
1              5              10              15
Ile Thr Ser Gly Leu Pro Arg Trp Met Tyr Val Phe Ile Ile Phe Gly
      20              25              30
Ala Val Ser Val Ala Thr Gly Ile Ile Ser Leu Leu Leu Leu Pro Asp
      35              40              45
Leu Pro Ser Thr Ala Arg Phe Leu Asn Pro Arg Glu Arg Ala Ile Ala
      50              55              60
Val Asp Arg Val Ser Arg Asn Gln Gln Gly Val Lys Asn His His Phe
65              70              75              80
Lys Trp Glu Gln Val Trp Gln Ala Ala Arg Asp Pro Lys Thr Trp Leu
      85              90              95
Leu Phe Val Met Ala Val Gly Ala Gln Val Pro Asn Ser Ala Leu Thr
      100             105             110
Ser Val Cys Phe Thr Ser Met Leu His Cys
      115             120

```

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<210> 43927
<211> 72

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19843

<212> PRT  
<213> A.fumigatus

<400> 43927

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Trp | Ile | Phe | Gln | Ala | Pro | Trp | Val | Lys | Thr | Ala | Gly | Glu | Leu | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Cys | Ser | Ala | Gly | Asp | Asp | Lys | Cys | Leu | Cys | Ser | Gln | Ala | Asn | Tyr | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Gly | Ile | Arg | Asp | Cys | Thr | Thr | Glu | Ala | Cys | Pro | Asp | Asp | Asp | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Ala | Val | Leu | Ser | Ser | Ala | Leu | Ser | Ser | Cys | Pro | Ser | Lys | His | Ser |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| His | Ser | Ala | Leu | Pro | Gln | Cys | Asp |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |

<210> 43928  
<211> 95  
<212> PRT  
<213> A.fumigatus

<400> 43928

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gln | Ser | Leu | Gly | Asp | Ser | Ala | Ala | Val | Thr | Ala | Thr | Gly | Ala | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Ser | Ser | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Asp | Ser | Gly | Ser | Gly | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser | Gly | Ser |
|     |     | 50  |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Gly | Ser | Asn | Ser | Gly | Ser | Gly | Ser | Ala | Ser | Ser | Thr | Ala | Thr | Gly | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Thr | Gly | Ser | Glu | Asn | Ser | Thr | Thr | Gly | Gly | Ala | Gly | Ala | Gly |     |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

<210> 43929  
<211> 141  
<212> PRT  
<213> A.fumigatus

<400> 43929

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ala | Pro | Ala | Pro | Pro | Val | Val | Leu | Phe | Ser | Leu | Pro | Val | Ala | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Val | Ala | Val | Glu | Glu | Ala | Glu | Pro | Glu | Pro | Glu | Leu | Glu | Pro | Glu |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Leu | Glu |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Pro | Glu |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Glu | Pro | Glu | Ser | Glu | Pro | Glu | Pro | Glu | Pro | Glu | Leu | Glu | Pro | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Pro | Val | Ala | Val | Thr | Ala | Ala | Glu | Ser | Pro | Asn | Asp | Cys | Asn | Gln |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| His | Pro | Ala | Gln | Ser | His | Trp | Gly | Ser | Ala | Glu | Trp | Glu | Cys | Leu | Leu |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Gly | Gln | Glu | Glu | Arg | Ala | Leu | Glu | Arg | Thr | Ala | Met | Ala | Ser | Ser | Ser |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

19844

Gly Gln Ala Ser Val Val Gln Ser Arg Ile Pro Tyr Pro  
130 135 140

<210> 43930  
<211> 102  
<212> PRT  
<213> A.fumigatus

<400> 43930  
Phe Glu Glu Arg Gly Cys Arg Gln Gly Met Ser Arg Ile His Ile Gln  
1 5 10 15  
Val Tyr Ala Pro Asp His Val Trp Gln Arg Ala Asn His Tyr Gln Arg  
20 25 30  
Gln Leu Arg Asp Leu Gly Ile Met Val Val Gln Asp Ala Arg Ile Cys  
35 40 45  
Arg His Leu Ala Ala Pro Ser Ile Leu Arg Thr Pro Lys Phe Val Asn  
50 55 60  
Ala Leu Ala Tyr Gly Pro Ala Ile Val Asn Ile Glu Phe Ile Thr Glu  
65 70 75 80  
Cys Leu Lys Lys Asn Glu Leu Leu Asn Pro Asp Asp Phe Pro Leu Val  
85 90 95  
Asp Lys Ser Ala Glu Lys  
100

<210> 43931  
<211> 219  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (1), (2), (3), (4), (5), (6), (7), (8), (9)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43931  
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Thr Ser Ala Pro Glu Pro  
1 5 10 15  
Pro Ser Lys Lys Ala Leu Arg Lys Ala Lys Lys Lys Val Ala Glu Pro  
20 25 30  
Thr Thr Asp Pro Thr Thr Lys Gln Glu Ala Ala Val Pro Ser Lys Lys  
35 40 45  
Gln Glu Asp Glu Ala Pro Lys Lys Arg Ser Asp His Gly Ile Trp Ile  
50 55 60  
Gly Asn Leu Ala Phe Ser Val Thr Lys Asp Asp Leu Arg Lys Phe Leu  
65 70 75 80  
Thr Ser Asn Cys Thr Phe Ala Asp Thr Thr Ile Thr Arg Ile His Leu  
85 90 95  
Pro Lys Gly Gln Glu Lys Phe Gly Lys Ala Gln Asn Lys Gly Phe Ala  
100 105 110  
Tyr Ile Asp Leu Ala Asn Glu Lys Ala Val Lys Glu Ala Val Gly Leu  
115 120 125  
Ser Glu Gln Leu Leu Ser Gly Arg Arg Val Leu Ile Lys Asp Ala Lys  
130 135 140  
Asn Phe Asp Gly Arg Pro Lys Lys Ser Glu Ser Asp Ser Ala Ala Thr  
145 150 155 160  
Val Thr Lys Pro Pro Ser Lys Arg Ile Phe Val Gly Asn Leu Gly Phe

## 19845

165 170 175  
 Asp Val Thr Lys Glu Val Leu Glu Glu His Phe Gly Gln Cys Gly Thr  
 180 185 190  
 Val Ala His Val His Val Ala Thr Phe Gln Asp Ser Gly Lys Cys Lys  
 195 200 205  
 Gly Tyr Ala Trp Val Glu Phe Glu Asp Leu Ala  
 210 215

<210> 43932  
 <211> 66  
 <212> PRT  
 <213> A.fumigatus

<400> 43932  
 Ser Lys Ile Leu Glu Leu His Pro Ser Ile Ala Leu Ala Phe Ser Thr  
 1 5 10 15  
 Ile Leu Lys Arg Cys His Met Tyr Met Cys Asp Gly Thr Ala Leu Ser  
 20 25 30  
 Lys Met Phe Leu Lys Asn Leu Phe Cys Asn Ile Lys Ala Glu Ile Ala  
 35 40 45  
 Asn Glu Tyr Pro Phe Arg Arg Arg Phe Arg Asn Cys Cys Arg Gly Ile  
 50 55 60  
 Arg Leu  
 65

<210> 43933  
 <211> 203  
 <212> PRT  
 <213> A.fumigatus

<400> 43933  
 Arg Gln Leu Val Ile Pro Val Ala Ser Pro Thr Pro Ser Thr Val Thr  
 1 5 10 15  
 Ser Glu Ala Val Thr Thr Leu His Ser Thr Ser Thr Thr Thr Val Thr  
 20 25 30  
 Val Ile Ala Ser Ala Ser Thr Pro Ala Ala Ser Pro Ser Pro Ala Thr  
 35 40 45  
 Asp Lys Val Pro Leu Pro Thr Pro Ala Ile Thr Asn Phe Pro Ser Thr  
 50 55 60  
 Gly Val Tyr Thr Ile Pro Ala Thr Thr Val Thr Val Phe Glu Thr Thr  
 65 70 75 80  
 Thr Val Cys Gly Thr Thr Thr Thr Glu Leu Pro Ala Gly Thr His Thr  
 85 90 95  
 Tyr Gly Gly Val Thr Thr Val Val Glu Thr Ala Thr Thr Val Val Cys  
 100 105 110  
 Pro Tyr Ala Thr Val Glu Pro Ser Gly Thr Thr Val Thr Ser Val Ile  
 115 120 125  
 Lys Thr Thr Thr Tyr Val Cys Pro Ser Ala Gly Thr Tyr Thr Ile Ala  
 130 135 140  
 Pro Asn Asn Thr Thr Val Pro Thr Ser Asn Val Ile Val Tyr Pro Thr  
 145 150 155 160  
 Pro Ala Val Ile Thr Pro Gly Tyr Tyr Thr Gln Pro Glu Ala Asp Cys  
 165 170 175  
 Asp Arg His Pro His Arg Leu Thr Leu Cys Leu Pro Pro Ser Arg Pro  
 180 185 190  
 Arg Thr Ser Pro Thr Ser Gly Pro Gly Cys Pro

195

200

&lt;210&gt; 43934

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43934

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Ser Val Arg Val Thr Val Thr Val Cys Phe Arg Leu Ser Val Val Thr
1          5          10          15
Arg Ser Asp Asp Gly Gly Ser Gly Val Asp Asn Asp Val Ala Gly Arg
          20          25          30
Asp Gly Gly Val Val Gly Ser Asp Gly Val Gly Ala Ser Arg Gly Ala
          35          40          45
Asp Ile Gly Gly Gly Leu Asp His Ala Gly His Gly Gly Ala Arg Gly
          50          55          60
Leu Asp Gly Gly Val Gly Ala Asp Asn Ser Gly Arg Gly Leu Asn His
          65          70          75          80
Ser Gly Asp Thr Thr Val Gly Val Ser Thr Ser Arg Gln Leu Gly Ser
          85          90          95
Gly Gly Ser Ala His Gly Gly Cys Phe Glu Asp Gly His Ser Gly Gly
          100          105          110
Gly Asn Gly Val Asp Thr Ser Arg Gly Glu Val Gly Asp Gly Arg Ser
          115          120          125
Gly Gln Arg Asp Leu Ile Gly Ser Arg Ala Arg Ala Gly Arg Gly Ser
          130          135          140
Gly Gly Thr Gly Asn Asn Ser His Gly Gly Gly Ala Gly Arg Val Gln
          145          150          155          160
Ser Gly Asp Ser Leu Gly Ser Asp Gly Ala Gly Ser Gly Arg Arg Asn
          165          170          175
Gly Asp His

```

&lt;210&gt; 43935

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (98)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43935

```

Pro Arg Cys Val Cys Val Arg Pro Ser Leu Arg Val Ala Leu Arg Thr
1          5          10          15
Asp Glu Asn Gln Leu Gln Tyr His Pro Val Arg Asn Asn Ile Leu Leu
          20          25          30
Ser Gly Ser Thr Asp Gly Leu Val Asn Ile Tyr Asp Thr Thr Ile Thr
          35          40          45
Asp Glu Asp Asp Ala Leu Val Gln Val Ile Asn His Gly Ser Val His
          50          55          60
His Ala Gly Phe Leu Gly Glu Arg Thr Ile Tyr Ala Leu Ser His Asp
          65          70          75          80
Glu Asp Phe Ser Val His Pro Ala Thr Asp Pro Asp Glu Glu Pro Glu
          85          90          95

```

## 19847

Glu Xaa Ser Pro Gln Ala Pro Lys Ser Asp Glu Arg Tyr  
 100 105

<210> 43936  
 <211> 237  
 <212> PRT  
 <213> A.fumigatus

<400> 43936  
 Leu Gln Gly Ala Gln Arg Ile Ser Ser Gln Ser Ile Lys Arg Thr Met  
 1 5 10 15  
 Gly Glu Leu Asp Leu Pro Gly Ile Met Ser Asn Ile Asn Leu Arg Met  
 20 25 30  
 Asp Ala Asn Phe Asp Arg Asp Leu His Phe Lys Pro Asp Leu Asp Gly  
 35 40 45  
 Glu Lys Gly Arg Arg Lys Arg Lys Glu Ala Gly Asp Tyr Trp Glu Ala  
 50 55 60  
 Met Ala Ala Glu Ile Ala Ile Tyr Ala Phe Cys Ala Asn Gln Thr Glu  
 65 70 75 80  
 Asp Thr Thr Asn Asp Asp Gln Gln Asp Asp Pro Pro Gln Thr Phe Glu  
 85 90 95  
 Pro Arg Leu Pro Ala Met Phe Glu Thr Leu Gln Asp Val Leu Lys Thr  
 100 105 110  
 Leu Val Pro Glu Arg Asp His Pro Ala Val Thr Gln Asn Leu Glu Val  
 115 120 125  
 Ala Leu Leu Met Gln Gln Val Arg Lys Gly Val Leu Asp Met Val Gly  
 130 135 140  
 Ile Ala Asn Trp Leu Ala Arg Leu Leu Lys Thr His Cys Ala Pro Met  
 145 150 155 160  
 Arg Asp Glu Trp Ala Asp Arg Met Val Glu Gln Ile Arg Ala Gly Ser  
 165 170 175  
 Glu Ser Gln Asp Ser Met Glu Ile Val Arg Gly Leu Gln Thr Leu Phe  
 180 185 190  
 Ala Ile Leu Glu Ala Met Lys Leu Val Gly Leu Ala Val Val Gly Ser  
 195 200 205  
 Thr His Thr Gln Val Tyr Val Leu Thr Leu Leu Leu Leu Gly Arg Gly  
 210 215 220  
 Asp Val Leu Thr Thr Trp Lys Lys Arg Pro Leu Asp Ile  
 225 230 235

<210> 43937  
 <211> 141  
 <212> PRT  
 <213> A.fumigatus

<400> 43937  
 Lys Ser Leu Ser Arg Gly Cys Asn Ser Ser Pro Pro Ser Phe Thr Met  
 1 5 10 15  
 Ala Ser Asn Pro Val Asn Glu Arg Gly Val Phe Val His Glu Asn Thr  
 20 25 30  
 Ser Ala Pro Glu His Pro Ser Leu Met Gln Met Phe Ser Leu Lys Gly  
 35 40 45  
 Lys Thr Ala Ile Val Thr Gly Ala Ala Ala Gly Ile Gly Leu Ala Val  
 50 55 60  
 Ala Gln Gly Leu Ala Glu Ala Gly Ala Asn Val Ala Leu Trp Trp Gly  
 65 70 75 80

## 19848

Ala Asn Ser Ser Cys Pro Glu Arg Ala Ala Glu Ile Ala Ala Lys Tyr  
                     85                    90                    95  
 Gly Val Gln Cys Glu Tyr Ser Ser Glu Leu Ala Leu Val Pro Phe Arg  
                     100                    105                    110  
 Leu Asp Val Lys Lys Trp Lys Ser Asn Phe His Ser Gln Gly Leu Pro  
                     115                    120                    125  
 Gly Arg Cys Tyr Lys Pro Gln Gly Cys Pro Gly Gly Cys  
                     130                    135                    140

&lt;210&gt; 43938

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43938

Arg Cys Thr Leu Thr Val Arg Ala Asn Asn Ala Leu Glu Glu Glu Ser  
 1                    5                    10                    15  
 Trp Leu Asn Pro Cys His Ile Lys Ser Arg Val Gly Ile Ser Leu Trp  
                     20                    25                    30  
 Ala Asp Cys Gly Tyr Lys Val Leu Asn Thr Pro Val Cys Ser Arg Pro  
                     35                    40                    45  
 Leu Ile Gln Cys Leu Trp Arg His Gln Lys Ala Thr Lys Ser Thr Thr  
                     50                    55                    60  
 Arg Thr Tyr Phe Ser Leu Thr Met Arg Ile Ser Val Gly Ala Leu Leu  
 65                    70                    75                    80  
 Gly Leu Thr Ala Leu Ser His Ala Thr Thr Glu Lys Arg Ala Ala Ser  
                     85                    90                    95  
 Ala Ser Ala Tyr Cys Ser Asn Ser Ala Gly Asn Tyr Lys Leu Ser Ser  
                     100                    105                    110  
 Ile Ala Ala Pro Val Gln  
                     115

&lt;210&gt; 43939

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43939

Cys Leu Leu Pro Asp Trp Leu Lys Lys Ile Val Thr Ala Ala Gly Met  
 1                    5                    10                    15  
 Lys Thr Glu Val Gly Arg Ile Ala Lys Leu Leu Gln Glu Thr Ser Asp  
                     20                    25                    30  
 Asp Ala Asp Ser Ser Arg Leu Val Gln Ala Val Arg Arg Val Lys Ser  
                     35                    40                    45  
 Thr Ala Glu Asn Val Leu Gly Leu Ala Gly Thr Pro Leu Gln Val Lys  
                     50                    55                    60  
 Leu Ser Lys Phe Ala Leu Leu Phe Ala Leu Ala Val Leu Leu Ala  
 65                    70                    75                    80  
 Ile Ile Val Phe Ser Val Asn Lys Trp Asp Ile Glu Gly Glu Val Leu  
                     85                    90                    95  
 Ile Tyr Gly Ile Ala Ile Gly Val Ala Val Ile Pro Glu Ser Leu Ile  
                     100                    105                    110  
 Ala Val Leu Thr Ile Thr Met Ala Val Gly Thr Lys Ala Met Ala Lys  
                     115                    120                    125  
 Gly Asn Val Ile Val Arg Lys Leu Gln Cys Leu Glu Ala Val Gly Gly  
                     130                    135                    140



# 19849

Val Thr Asn Ile Cys Ser Asp Lys Thr Gly Thr Leu Thr Gln Gly Arg  
 145 150 155 160  
 Met Ile Ala Arg Thr Ala Trp Ile  
 165

<210> 43940  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 43940  
 Met Ala Asp Glu Ile Ala Leu Ala Val Val Arg Ser Val Ala Asp Asn  
 1 5 10 15  
 Leu Thr Gln Gln Thr Asn Val Asn Ala Ala Ala Ile Arg His Gln Lys  
 20 25 30  
 Ser Glu Ala Leu Val Phe Leu Leu Val Phe His Cys Leu Cys Tyr  
 35 40 45  
 His Ser Thr Glu Tyr Gly Ala Gly Phe Ser Thr Val Lys  
 50 55 60

<210> 43941  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 43941  
 Ser Phe Leu Ser Ala Tyr Lys Asp Ser Pro Gly Val Ala Trp Ser Arg  
 1 5 10 15  
 Ser Gly Cys Arg Leu Met Tyr Gly Tyr Gln Asn Thr Thr Thr Thr Pro  
 20 25 30  
 Cys Ala Tyr Thr Leu Asn Lys Tyr Tyr Leu Pro Phe Ser Pro Ser Gly  
 35 40 45  
 Ile Asp Phe Leu Ala Pro His Ile Ala Val Tyr Ile Val Val Phe His  
 50 55 60  
 Cys Ser Pro Gly Lys Phe Ser Ile Trp Arg Met Ala Gly Leu  
 65 70 75

<210> 43942  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 43942  
 Pro Phe Ser Ala Tyr Asn Phe Gly Ile Pro Ala Leu Pro Trp Ile Asn  
 1 5 10 15  
 Gly Arg Asp Leu Ala Gly Glu Val Ile Gln Val Ser Asp Gly Cys Ser  
 20 25 30  
 Arg Leu Arg Val Gly Asp Ile Val Leu Val Pro Ser Thr Asp Tyr Arg  
 35 40 45  
 Asp Met Phe Ser Ala Arg Gly Cys Arg Thr Ala Leu Glu  
 50 55 60

<210> 43943  
 <211> 172  
 <212> PRT  
 <213> A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43943

```

His Phe Pro Thr Ala Ala Ala Ser Thr Ala Ser Pro Pro Ala Thr Ser
1          5          10          15
Thr Xaa Gly Ile Thr Leu Leu Asn Ala Ala Leu Arg Asn Ile Gly Leu
          20          25          30
Phe Leu Pro Pro Trp Leu His Leu Ile Leu Leu Lys Ile Pro Trp Leu
          35          40          45
Thr Arg Asp Trp Trp Ala Phe Gln Ser Phe Cys Ser Glu Arg Leu His
          50          55          60
Ala Arg Met Arg Met Asp Leu Pro Ile Pro Asp Ile Ser Ala Ser Leu
65          70          75          80
Leu Ala Pro Leu His Gly Arg Ala Pro Thr Pro Glu Glu Arg Leu Met
          85          90          95
Leu Asp Gly Asp Ala Arg Leu Ile Val Val Gly Gly Ser Asp Thr Thr
          100          105          110
Ala Val Ser Leu Cys Gly Ala Leu Tyr Glu Leu Ala Arg His Pro Glu
          115          120          125
Gln Leu Arg Lys Leu Arg Glu Glu Val Glu Pro Phe Val Asp Ala Ala
          130          135          140
Gly Asp Val Arg Gly Ala Asp Ile Ala Leu Leu Glu His Leu Asn Gly
145          150          155          160
Val Ile Asn Glu Ala Leu Lys Met Tyr Pro Ala Val
          165          170

```

&lt;210&gt; 43944

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (156), (179)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43944

```

Asp Thr Ala Gly Tyr Ile Phe Arg Ala Ser Leu Ile Thr Pro Phe Arg
1          5          10          15
Cys Ser Arg Ser Ala Ile Ser Ala Pro Arg Thr Ser Pro Ala Ala Ser
          20          25          30
Thr Asn Gly Ser Thr Ser Ser Arg Ser Leu Arg Ser Cys Ser Gly Cys
          35          40          45
Arg Ala Ser Ser Tyr Arg Ala Pro His Ser Asp Thr Ala Val Val Ser
          50          55          60
Leu Pro Pro Thr Thr Ile Ser Arg Ala Ser Pro Ser Ser Ile Ser Leu
65          70          75          80
Ser Ser Gly Val Gly Ala Leu Pro Cys Ser Gly Ala Ser Ser Glu Ala
          85          90          95
Leu Met Ser Gly Ile Gly Arg Ser Met Arg Met Arg Ala Trp Ser Arg
          100          105          110
Ser Leu Gln Asn Asp Trp Lys Ala His Gln Ser Arg Val Ser Gln Gly

```

[illegible]

```
<210> 43945
<211> 131
<212> PRT
<213> A.fumigatus
```

```
<210> 43946
<211> 165
<212> PRT
<213> A.fumigatus
```

```

<400> 43946
Leu Trp Ser Val Cys Arg Ser Gly Gly Glu Asp Leu Gly Ala Leu Ala
1          5          10          15
Gly Ser Ser Ser Pro Arg Thr Met Arg Ala Leu Arg Lys Ile Gln Ser
          20          25          30
His Gln Ile Leu Ser Ser Lys Thr Ser Ala Phe Ser Gly Pro Thr Ser
          35          40          45
His Leu Ser Thr Ala Arg Ser Ser Val Asn Ala Glu Ala Gln Gln Ala
          50          55          60
His Leu Asp Ser Pro Val Arg Leu Arg His Arg Arg Ala Arg Ser Asn
65          70          75          80
Ser Asp Ala Gly Ser Gly Glu Arg Pro Ile Leu Gln Ala Gln Lys Arg
          85          90          95
Ser Gly Arg Lys Thr Gly Ser Gly Phe Gly Ile Lys Arg Ser Val Leu
          100          105          110
Glu Thr Leu Leu Arg Asp Gly Pro Gln Asn Gly Asp Val Glu Asp Ala

```

## 19852

115 120 125  
 Leu Lys Glu Leu Arg Tyr Leu Val Leu Ser Thr Arg Val Glu Ala Asp  
 130 135 140  
 Gly Asp Gly Met Val Cys Gly Arg Cys Asn Ser Ala Val Thr Ser Arg  
 145 150 155 160  
 Arg Ile Met Gly Leu  
 165

&lt;210&gt; 43947

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (87), (96)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43947

Gln Asp Ile Lys Val Phe Asp Glu Glu Ile Thr Ala Lys Trp Arg Lys  
 1 5 10 15  
 Glu Ile Ile Gly Ser Gly Glu Asp Ile Thr Pro Asn Met Met Asp Trp  
 20 25 30  
 Ile Ile Lys Glu Ala Gln Trp Lys Ala Lys Val Phe Gln Asp Thr Lys  
 35 40 45  
 His Val Val Ala Phe Asp Ala Gly Val Val Lys Ser Asp Ile Ala Ile  
 50 55 60  
 Gly Glu Glu Leu Arg Gln Val Leu Lys Asp Ala Val Arg Pro Leu Glu  
 65 70 75 80  
 Asp Val Pro Glu Gly Leu Xaa Asp Tyr His Pro Gly Ser Asp Asp Xaa  
 85 90 95  
 Val Val Asp Leu Gly Pro Ser Val Pro  
 100 105

&lt;210&gt; 43948

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43948

Ser Ile Met Pro Gly Gly Gln Tyr Gln Lys Leu Leu Ile Ala Thr Ser  
 1 5 10 15  
 Ala Gln Ala Ser Gly Arg Thr Pro Ile Tyr Asn Phe Thr Ser Thr Val  
 20 25 30  
 Lys Gly Ser Lys Arg Phe Thr Trp Ile Thr Arg Glu Leu Leu Ala Asp  
 35 40 45  
 Met Leu Gly Lys Glu Glu Arg Glu Phe Gly Lys Ala Arg Asn Ser Ile  
 50 55 60

&lt;210&gt; 43949

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

## 19853

&lt;222&gt; (33), (55), (58)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43949

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Gly | Leu | Met | Phe | Lys | Tyr | Leu | His | Leu | Ile | Phe | Ser | Arg | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Phe | Leu | Arg | Pro | Cys | Gln | Ser | Lys | Pro | Asn | Leu | Phe | Cys | Ser | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Xaa | Gln | His | Asn | Phe | Leu | Asp | Phe | Gln | Leu | Pro | Ser | Lys | Tyr | His | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Phe | Leu | Asp | Ser | Ala | Xaa | Gln | Pro | Xaa | Asn | Gly | Ile | Gly |     |     |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 43950

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (151), (155)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43950

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Arg | Gly | Ala | Gln | Gln | Ser | Gln | Ser | Thr | Gly | Gly | Gly | Leu | Phe | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Asn | Ala | Gln | Gln | Lys | Pro | Met | Phe | Gly | Thr | Thr | Pro | Ser | Ala | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Gly | Gly | Gly | Leu | Phe | Gly | Asn | Ala | Ala | Lys | Asp | Lys | Pro | Ala | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Thr | Thr | Pro | Thr | Thr | Thr | Ala | Asp | Gly | Ala | Ala | Lys | Pro | Leu | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Ala | Ala | Pro | Ser | Ala | Pro | Ala | Gly | Gln | Ala | Gln | Gly | Ser | Ser | Leu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Phe | Lys | Met | Pro | Ser | Ser | Ser | Ala | Asp | Ser | Gly | Ser | Lys | Pro | Ala | Phe |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Pro | Ser | Leu | Gly | Thr | Thr | Thr | Thr | Thr | Thr | Thr | Ser | Gln | Pro | Ser | Thr |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Leu | Thr | Thr | Ser | Ser | Asp | Thr | Pro | Gln | Lys | Ser | Leu | Phe | Pro | Ser |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Gly | Gly | Thr | Thr | Ser | Ala | Thr | Pro | Ser | Thr | Thr | Pro | Ala | Ala | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| Pro | Ala | Gly | Gly | Gly | Leu | Xaa | Gly | Gly | Leu | Xaa | Ala | Ser | Lys | Pro | Ala |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Glu | Thr | Gly | Ala | Ala | Thr | Thr | Thr | Thr | Ala | Pro | Ala | Ser | Gln | Pro | Ala |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala | Ala | Thr | Gly | Leu | Phe | Gly | Lys | Pro | Ala | Glu | Thr | Thr | Ser | Ser |     |
|     |     |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Thr | Gln | Ala | Pro |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 195 |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 43951

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19854

<220>  
 <221> UNSURE  
 <222> (64), (68)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43951

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Phe | Arg | Val | Glu | Thr | Cys | Phe | Pro | Val | Ser | Arg | Tyr | Asn | Tyr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Asn | His | Asp | Gln | Pro | Thr | Phe | Tyr | Ser | Leu | Asp | His | Ile | Ile | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| His | Ser | Ala | Lys | Val | Thr | Ile | Pro | Gln | Ser | Trp | Arg | Tyr | Tyr | Val | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Pro | Val | Asn | Tyr | Thr | Ser | Gly | Arg | Ser | Ser | Trp | Arg | Trp | Ser | Xaa |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Trp | Trp | Thr | Xaa | Cys | Val | Gln | Ala | Cys | Gly | Asn | Arg | Cys | Gly | Asn | Asn |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| His | His | Arg | Ser | Arg | Phe | Ser | Thr | Arg | Ser | Gly | Asp | Arg | Arg | Thr | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

Arg

<210> 43952  
 <211> 203  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (9)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43952

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Ser | Gly | Arg | Gly | Ser | Phe | Xaa | Pro | Trp | Ser | Ala | Ser | Cys | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Ala | Thr | Arg | Gln | Ala | Pro | Pro | Ala | Pro | Thr | Gly | Ser | Ser | Tyr | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Gly | Phe | Asp | Met | Thr | Arg | Ser | Trp | Ala | Asn | Leu | Ser | Pro | Tyr | Gln |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Glu | Ala | Asp | Ser | Phe | Gly | Val | Pro | Lys | Gly | Met | Pro | His | Gly | Cys | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Ser | Gln | Val | His | Val | Leu | His | Arg | His | Ala | Glu | Arg | Tyr | Pro | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Pro | Tyr | Pro | Leu | Asp | Gly | Gln | Gly | Met | Glu | Asp | Phe | Ala | Ala | Lys | Trp |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Ser | Asn | Tyr | Thr | Arg | Ser | Leu | His | Leu | Lys | Ala | Pro | Ala | Thr | Gly | Pro |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Ser | Phe | Leu | Asn | Asp | Trp | Glu | Tyr | Ile | Leu | Gly | Glu | Asp | Thr | Leu |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Leu | Ala | Thr | Gly | Ala | Ala | Thr | Glu | Ala | Thr | Ala | Gly | Ala | Ser | Phe | Trp |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Asn | Tyr | Gly | Arg | Leu | Leu | Tyr | Arg | Ala | Gly | Arg | Glu | Asn | Gly | Ala |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Ala | Trp | Asn | Ala | Ser | Leu | Asn | Val | Tyr | Pro | Asn | Gly | Thr | Ala | Arg | Pro |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Lys | Pro | Val | Phe | Arg | Thr | Thr | Ser | Gln | Pro | Arg | Ile | Leu | Gln | Ser | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

## 19855

Arg Trp Trp Leu Ser Met Asp Ser Leu Val Gln  
 195 200

<210> 43953  
 <211> 150  
 <212> PRT  
 <213> A.fumigatus

<400> 43953  
 Ser Arg Gln Leu Phe Val Glu Asn Ser Gln Asp Thr Asp Val Leu Pro  
 1 5 10 15  
 Val Asp Tyr Arg Lys Met Ala Asp Pro Ile Ala Asp Ala Pro Val Ile  
 20 25 30  
 Asp Glu Phe Ala Gln Thr Arg Gly Gly Asp Asp Leu Phe Asp Asp Glu  
 35 40 45  
 Ile Ile Pro Val Ser Ala Asp Glu Gln Val Gln Ala Glu Val Gln Thr  
 50 55 60  
 Pro Glu Glu Asn Val Ala Asp Thr Lys Ser Gln Glu Pro Pro Arg Ile  
 65 70 75 80  
 Asp Thr Pro Pro Arg Ser Arg Gly Ala Asp Arg Arg Gly Gly Arg Gly  
 85 90 95  
 Arg Gly Arg Gly Arg Gly Gly Arg Gly Ser His His Ser Cys Arg Gly  
 100 105 110  
 Arg Ala Tyr Gly Gly Pro Arg Gly Met Ser Thr Asp Asn Ala Ala Glu  
 115 120 125  
 Arg Glu Asp Asn Lys Val Glu Asn Ala Ala Arg Asp Thr Pro Ala Glu  
 130 135 140  
 Gly Ser Glu Gln Ser Ala  
 145 150

<210> 43954  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 43954  
 Thr Cys Pro Ser Ala Leu His Met His Ala Arg Asp Met Asn Gly Ala  
 1 5 10 15  
 Thr Arg Val Leu Arg Val Leu Phe Leu Ser Leu Ser Leu Leu Val Tyr  
 20 25 30  
 Pro Leu His Val Ser Ala Ala Gly Tyr Leu Ser Val Val Ala Pro Gly  
 35 40 45  
 Ser Trp Cys Leu Gln His Phe Pro Pro Val Ser Glu Pro Gln Leu Val  
 50 55 60  
 Leu Val Arg Leu Arg Ile Leu Gly  
 65 70

<210> 43955  
 <211> 70  
 <212> PRT  
 <213> A.fumigatus

<400> 43955  
 Ala Arg Arg Gly Ile Tyr Pro Trp Trp Leu Leu Ala Leu Gly Val Cys  
 1 5 10 15  
 Asn Ile Phe Leu Arg Cys Leu Asn Leu Ser Leu Tyr Leu Phe Val Cys

## 19856

20 25 30  
 Gly Tyr Trp Asp Asp Phe Val Ile Glu Gln Ile Val Pro Ala Ser Ser  
 35 40 45  
 Leu Arg Glu Leu Val Tyr Asp Arg Arg Val Gly Asp Gly Ile Gly His  
 50 55 60  
 Phe Ser Val Ile His Trp  
 65 70

<210> 43956  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 43956  
 Arg Arg Thr Gly Arg Gly Gln Thr Trp Pro Phe Leu Thr Asp Pro Pro  
 1 5 10 15  
 Ile Tyr Ser Ile Ile Ala Asn Thr Phe Ile Phe Ser Phe Leu Ile Ala  
 20 25 30  
 Ile Val Lys Trp Glu Val Asn Leu Arg Gln Leu Thr Ser Arg Tyr Val  
 35 40 45  
 Phe Ser Phe Cys Ser Thr Gly Thr Leu Thr Pro Leu Ile Leu Asn Pro  
 50 55 60  
 Ser Asp Lys Ile  
 65

<210> 43957  
 <211> 211  
 <212> PRT  
 <213> A.fumigatus  
  
 <220>  
 <221> UNSURE  
 <222> (3),(7)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43957  
 Arg Pro Xaa Ala Ile Ala Xaa Pro Ser Met Pro Val Val Lys Ile Gly  
 1 5 10 15  
 Met Leu Arg Ile Thr Pro Ala Arg Val Lys Ser Thr Ser Phe Thr Phe  
 20 25 30  
 Ala Leu Ile Thr Arg Arg Ser Arg His Arg Gly Gly Thr Arg Tyr Phe  
 35 40 45  
 Ser Arg Gly Ile Asp Glu His Gly His Val Ser Asn Tyr Asn Glu Thr  
 50 55 60  
 Glu Gln Ile Val Ile Leu Asn Asp Ala Ala Gly Gly Leu Ser Gly Phe  
 65 70 75 80  
 Ala Pro Gly Gln Ser Met Ala Lys Asp Lys Ser Gly Gly Ser Gly Gln  
 85 90 95  
 Asp Leu Gln Ile Met Ser Phe Val Gln Thr Arg Gly Ser Val Pro Val  
 100 105 110  
 Tyr Trp Ala Glu Val Asn Asn Leu Lys Tyr Ile Pro Lys Leu Gln Val  
 115 120 125  
 Arg Gly Val Glu Thr Ala Val Asp Ala Ala Arg Lys His Phe Ser Glu  
 130 135 140  
 Gln Ile Arg Ile Tyr Gly Glu Asn Tyr Met Val Asn Leu Val Asn Gln  
 145 150 155 160



## 19857

Lys Gly Arg Glu Glu Arg Val Lys Thr Ala Tyr Glu Gln Leu Val Arg  
                           165                          170                          175  
 Ile Leu Val Ser Ser Ser Ile Glu Asp Pro Glu Ala Asp Glu Asn Thr  
                           180                          185                          190  
 Ser Glu Lys Val His Val Val Glu Ser Gly Gln Lys Gln Lys Glu Leu  
                           195                          200                          205  
 Asp Arg Leu  
                           210

&lt;210&gt; 43958

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43958

Thr Arg Ala Leu Arg Val Val Ala Ile Ala Ala Gly Arg Gln Leu Gly  
 1                          5                          10                          15  
 Ser Arg Leu Phe Gly Pro Pro Ala Leu Lys Ser Ala Lys Leu Ser Tyr  
                           20                          25                          30  
 Glu Asn Ile Pro Thr Val Val Phe Ala His Pro Glu Val Gly Thr Ile  
                           35                          40                          45  
 Gly Leu Thr Glu Pro Gln Ala Arg Gln Arg Tyr Gly Asp Asp Lys Val  
                           50                          55                          60  
 Lys Val Tyr Tyr Thr Lys Phe Thr Ala Met Tyr Tyr Asp Val Leu Pro  
 65                          70                          75                          80  
 Thr Glu Glu Lys Lys Lys Asn Pro Thr Glu Phe Lys Ile Val Cys Val  
                           85                          90                          95  
 Gly Pro Glu Glu Lys Val Val Gly Leu His Ile Leu Gly Leu Gly Val  
                           100                          105                          110  
 Gly Glu Met Leu Gln Gly Phe Gly Val Ala Ile Lys Met Gly Ala Thr  
                           115                          120                          125  
 Lys Lys Asp Phe Asp Ser Cys Val Ala Ile His Pro Thr Ser Ala Glu  
                           130                          135                          140  
 Glu Leu Val Thr Met Arg  
                           145                          150

&lt;210&gt; 43959

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43959

Arg Pro Ser Ser Gln Val Pro Gln Ala Ile Ser Glu Gly Arg Arg Leu  
 1                          5                          10                          15  
 Tyr Val Gly Asn Met Pro Tyr Thr Ala Lys Ser Glu Asp Val Gln Ala  
                           20                          25                          30  
 Leu Phe Thr Ala Ala Asn Phe Pro Met Tyr Gly Asp Lys Asn Ser Cys  
                           35                          40                          45  
 Met Glu Met Ala Lys Thr Glu Cys Phe Ala Ala Ser Gly Ser Ile Ser  
                           50                          55                          60  
 Arg  
 65

&lt;210&gt; 43960

&lt;211&gt; 122

&lt;212&gt; PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (119)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43960

```

Val Leu Cys Ser Glu Arg Ile Asp Ile Ala Ile Asp Pro Phe Thr Gly
1           5           10           15
Arg Asn Pro Ser Tyr Cys Phe Val Asp Leu Glu Thr Arg Glu Leu Ala
          20          25          30
Asn Lys Ala Met Thr Glu Leu Asp Gly Arg Asp Met Leu Gly Arg Pro
          35          40          45
Val Lys Ile Lys Pro Gly Val Ala Lys Thr Ala Ser Glu Arg Ser Gln
          50          55          60
Gln Gln Gln His Gln Gln Arg Thr Glu Ser Ser Pro Arg Ser Asp
65          70          75          80
Lys Gly Arg Pro Phe Ala Leu Asp Arg Trp Arg Arg Asn Asp Thr Pro
          85          90          95
Ala Phe Ala Lys Val Asp Ser Val Ser Ser Arg Arg Leu Tyr Val Gly
          100         105         110
Ala His Arg Pro Thr Ser Xaa Lys Ser Val
          115         120

```

<210> 43961

<211> 72

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (54), (61), (71)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43961

```

Arg Gly Phe Pro Tyr Asp Leu Ser Gln Arg His Val Met Glu Ala Pro
1           5           10           15
Asn Ser Leu Ala Val Asp Ala Trp Asp Gly Ser Phe Thr Tyr Ala Glu
          20          25          30
Leu Asn Asp Leu Ser His Arg Leu Ala Thr His Phe Asp Arg Asp Gly
          35          40          45
Val Asp Pro Asn Val Xaa Arg Pro Val Tyr Phe Glu Xaa Leu Ala Gly
          50          55          60
Arg Pro Leu Leu Cys Trp Xaa Ser
65          70

```

<210> 43962

<211> 120

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (111)

<223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43962

```

Pro Gly Leu Ile Pro Ala Pro Ala Asn His Pro Pro Ser Arg Gln Glu
1          5          10          15
Gln Glu Ala Thr Leu His Ser Arg Thr Arg Ser Arg Cys Pro Gln Pro
          20          25          30
Arg Arg Ser Asn Thr Tyr Ile Glu Cys Pro Asn Gln Arg Ala Arg Gln
          35          40          45
Pro Ser Arg Tyr Pro Gln Pro Arg Ile Arg Arg Ser Ile Gln Gln Glu
          50          55          60
Gly Ile Asn Cys Arg Arg Arg Gln Gly Ala Pro Ala Asn Arg Gln Asp
65          70          75          80
Thr His Pro Ser Arg Arg Ser Pro Val Arg Arg Thr Thr Pro Arg Pro
          85          90          95
Ser Arg Ser Gly Arg Ala Ile Pro Lys Arg Arg Arg Thr Glu Xaa Phe
          100          105          110
Ser Pro Ser Ala Lys Asn Thr Arg
          115          120

```

&lt;210&gt; 43963

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (133)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43963

```

Asn Pro Pro Pro Arg Asn Leu Glu Val Pro Ile Ser Val Gly Asn Thr
1          5          10          15
Thr Met Tyr Gln Ser Ser Gln Gly Leu Ser Gln Leu Leu Gln Thr Ile
          20          25          30
Leu Gln Ala Asp Lys Ser Lys Lys Arg Arg Ser Ile Leu Gly Pro Glu
          35          40          45
Ala Gly Ala Pro Ser Pro Ala Gly Gln Thr His Thr Ser Asn Ala Pro
          50          55          60
Thr Ser Ala Arg Asp Ser Arg Ala Asp Thr Pro Ser His Ala Ser Ala
65          70          75          80
Gly Pro Ser Ser Lys Lys Gly Ser Thr Ala Ala Ala Ala Lys Glu Pro
          85          90          95
Pro Gln Thr Val Lys Thr Leu Thr Pro Ala Glu Glu Ala Arg Tyr Gly
          100          105          110
Val Gln His His Asp Arg Leu Val Pro Gly Val Gln Phe Arg Ser Asp
          115          120          125
Gly Ala Gln Arg Xaa Ser Arg Arg Ala Pro Arg Ile Arg Ala Ser Ala
          130          135          140
Arg
145

```

&lt;210&gt; 43964

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19860

<220>  
 <221> UNSURE  
 <222> (135)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43964

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Lys | Thr | Leu | Pro | Gln | Gly | Thr | Ser | Lys | Cys | Pro | Ser | Val | Trp | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Leu | Pro | Cys | Thr | Ser | Leu | Ala | Arg | Ala | Tyr | Pro | Ser | Ser | Cys | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Ser | Ser | Lys | Pro | Thr | Arg | Ala | Arg | Ser | Asp | Ala | Pro | Phe | Ser | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Lys | Pro | Val | Pro | Pro | Ala | Pro | Gln | Val | Lys | His | Ile | His | Arg | Met |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Gln | Pro | Ala | Arg | Ala | Thr | Ala | Glu | Gln | Ile | Pro | Pro | Ala | Thr | His |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Pro | Pro | Val | His | Pro | Ala | Arg | Arg | Asp | Gln | Leu | Pro | Pro | Pro | Pro | Arg |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Pro | Arg | Lys | Pro | Ser | Arg | His | Ser | Pro | Gln | Pro | Lys | Lys | Pro | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Ala | Tyr | Asn | Thr | Thr | Thr | Val | Ser | Phe | Arg | Ala | Cys | Asn | Ser | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Thr | Ala | His | Arg | Gly | Xaa | Leu | Ala | Glu | Arg | Gln | Glu | Tyr | Ala | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| Ala | Leu | Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43965  
 <211> 108  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (95), (96), (97), (98), (99), (100)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43965

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Phe | Asn | Ile | Gly | Val | Trp | Ser | Arg | Met | Lys | Trp | Pro | Arg | Ala | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ile | Pro | Ser | Pro | Asn | His | Phe | Phe | Pro | Gly | Asn | Trp | Gln | Ala | Asn |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Pro | Trp | Ala | Leu | Phe | Ser | Leu | Lys | Lys | Pro | Thr | Cys | Leu | Asn | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Ser | Pro | Ser | Phe | Trp | Cys | His | Ala | Arg | Gly | Ser | His | Val | Tyr | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Arg | Arg | Phe | Leu | Gly | Ile | Val | Leu | Thr | Leu | Ile | Phe | Phe | Asn | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Phe | Asp | Pro | Phe | Met | Pro | Phe | Pro | Ser | Leu | Phe | Ser | Leu | Xaa | Xaa |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Xaa | Xaa | Xaa | Xaa | Gln | Lys | Tyr | Ile | Ser | Asp | Leu | Ala |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

<210> 43966  
 <211> 116  
 <212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (46)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 43966

```

Arg Glu Tyr Ser Gly Trp Tyr Phe Lys Asp Tyr Phe Asn Gln Pro Ser
1          5          10          15
Arg Ala Ala Ile Gly Thr Val Val Ala Ile Leu Glu Val Gly Ala Phe
          20          25          30
Ile Ser Ser Leu Ile Val Gly Arg Ile Gly Asp Leu Ile Xaa Thr Arg
          35          40          45
Lys Asn Ile Leu Tyr Gly Ser Val Val Phe Ser Ile Gly Gly Ala Phe
          50          55          60
Gln Thr Phe Ala Thr Gly Leu Pro Met Met Met Leu Gly Arg Ile Val
65          70          75          80
Ala Gly Leu Gly Val Gly Ala Leu Ser Thr Ile Val Pro Val Tyr Gln
          85          90          95
Ser Glu Ile Ser Val Cys Lys Asn Pro Ser Ile Ser Pro Ala Pro Ile
          100          105          110
Leu Cys Arg Ser
          115

```

<210> 43967

<211> 132

<212> PRT

<213> A.fumigatus

<400> 43967

```

Phe His Ser Cys Leu Leu Phe Val Phe Phe Phe Ser Pro Phe Tyr Leu
1          5          10          15
Phe Ile Leu Ser Ser Leu Leu Leu Phe Ser Gln Thr Asn Pro Leu Leu
          20          25          30
Phe Leu Ser Leu Gly Gly Ser Leu Leu Trp Ser Cys Val Cys Thr Leu
          35          40          45
Ala Lys Pro Ile Gly Pro Cys Ser Glu Pro Ile Thr Cys Asp Ser Pro
          50          55          60
Ala His Lys Ser Ala Ser Leu Asn Leu Ser Ile Ser Arg Ala Pro Pro
65          70          75          80
Leu Asn Ile His His Ser Asp Ile Pro Pro Ile Gln Ser Glu His Pro
          85          90          95
Ser Phe Cys Ser Thr Ile Asp Cys Ser Leu Pro Lys Thr Asp Phe Arg
          100          105          110
Thr Pro Phe Tyr Ala Ile Phe Arg His Ser Leu Leu Lys Cys Ser Pro
          115          120          125
Pro Tyr Ser Arg
          130

```

<210> 43968

<211> 174

<212> PRT

<213> A.fumigatus

<400> 43968

## 19862

Ser Ala Gly Val Thr Asp Pro Tyr Glu Phe Tyr Lys Tyr Val His Leu  
 1 5 10 15  
 Ser Glu Val Gly Asn Cys Ile Gly Ser Gly Ile Gly Gly Thr His Ala  
 20 25 30  
 Leu Arg Gly Met Tyr Lys Asp Arg Tyr Leu Asp Lys Pro Leu Gln Lys  
 35 40 45  
 Asp Ile Leu Gln Glu Ser Phe Ile Asn Thr Met Ser Ala Trp Val Asp  
 50 55 60  
 Met Leu Leu Leu Ser Ser Thr Gly Pro Ile Lys Thr Pro Val Gly Ala  
 65 70 75 80  
 Cys Ala Thr Gly Val Glu Ser Val Asp Ile Gly Tyr Glu Thr Met Val  
 85 90 95  
 Glu Gly Lys Ala Arg Val Cys Phe Val Gly Gly Phe Asp Asp Phe Gln  
 100 105 110  
 Glu Glu Gly Ser Tyr Glu Phe Ala Asn Met Lys Ala Thr Ser Asn Ala  
 115 120 125  
 Glu Asp Glu Phe Ala His Gly Arg Thr Pro Gln Glu Met Ser Arg Pro  
 130 135 140  
 Thr Thr Thr Thr Arg Ala Gly Phe Met Glu Ser Gln Gly Cys Gly Met  
 145 150 155 160  
 Gln Leu Ile Leu Gln Pro Arg Arg Leu Lys Ile Met Arg Pro  
 165 170

<210> 43969  
 <211> 94  
 <212> PRT  
 <213> A.fumigatus

<400> 43969  
 Pro Ile Phe Ser Gln Thr Ser Tyr Cys Pro Arg Phe Phe Val Ser Ser  
 1 5 10 15  
 Phe Tyr Leu Phe Leu Leu Ser Pro Pro His Arg Leu Val Tyr Thr Arg  
 20 25 30  
 Arg Phe Thr Leu Val Pro His Leu Asp Thr Ser Ile Val Phe Asp Phe  
 35 40 45  
 Ser Ser Phe Pro Pro Thr Asn Val Ser Ile Thr Thr Phe Val Pro Tyr  
 50 55 60  
 Ser Gln Val Leu Leu Leu Phe Leu Arg Val Ser Ala Arg Gly Ser Arg  
 65 70 75 80  
 Leu Leu Ser Val Ser Tyr His Gln Pro Tyr Ala Arg Phe Asp  
 85 90

<210> 43970  
 <211> 211  
 <212> PRT  
 <213> A.fumigatus

<400> 43970  
 Asp Arg Gly Lys Thr Ser Leu Thr Asp Gly Leu Ile Ala Thr Asn Gly  
 1 5 10 15  
 Ile Ile Ser Pro Lys Leu Ala Gly Lys Ile Arg Tyr Leu Asp Ser Arg  
 20 25 30  
 Pro Asp Glu Gln Leu Arg Gly Ile Thr Met Glu Ser Ser Ala Ile Ser  
 35 40 45  
 Leu Tyr Phe Ser Met Met Arg Arg Ser Ser Pro Asp Thr Pro Pro Gln  
 50 55 60

## 19863

```

Pro Arg Glu Tyr Leu Ile Asn Leu Ile Asp Ser Pro Gly His Ile Asp
65                               70                               75                               80
Phe Ser Ser Glu Val Ser Thr Ala Ser Arg Leu Cys Asp Gly Ala Leu
                               85                               90                               95
Val Leu Val Asp Ala Val Glu Gly Val Cys Ser Gln Thr Val Thr Val
                               100                              105                              110
Leu Arg Gln Thr Trp Val Glu Gln Leu Lys Pro Ile Leu Val Ile Asn
                               115                              120                              125
Lys Ile Asp Arg Leu Val Gly Glu Leu Lys Met Ser Pro Ser Glu Ala
                               130                              135                              140
Tyr Ser His Leu Ser Arg Leu Leu Glu Gln Val Asn Ala Val Ile Gly
145                               150                               155                               160
Ser Phe Tyr Gln Gly Glu Arg Met Glu Glu Asp Leu Gln Trp Arg Glu
                               165                              170                              175
Arg Met Glu Glu Arg Ile Asn Ala Ser Ala Ala Arg Thr Ala Gln Lys
                               180                              185                              190
Gln Gly Gln Cys Asp Glu Thr Asn Met Ser Ser Val Asp Glu Ala Glu
                               195                              200                              205
Phe Glu Asp
                               210

```

&lt;210&gt; 43971

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (11), (13), (36)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43971

```

Asn Asp Glu Asp Ile Tyr Phe Ala Pro Glu Xaa Lys Xaa Val Ile Phe
1                               5                               10                               15
Cys Ile Ala Ile Asn Gly Trp Gly Ser Ile Val Pro Pro Pro Arg Ala
                               20                              25                              30
Gly Leu Arg Xaa Gly Asn Tyr Val Phe Lys Arg Leu Ile Leu Glu Lys
                               35                              40                              45
Ser Ala Met Gly Glu Asn Ser Asn Leu Asn Leu Lys Thr Lys Val
                               50                              55                              60

```

&lt;210&gt; 43972

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43972

```

Arg Lys Ile Arg Leu Leu Trp Ala Val Pro Pro Trp Trp Glu Ser Pro
1                               5                               10                               15
Glu Val Val Ile Glu Ala Thr Lys Glu Arg Ser Leu Leu His His Asn
                               20                              25                              30
Ile His Cys Ile Ala Tyr Pro Glu Ala Ile Arg Ile Tyr Thr Asn Gly
                               35                              40                              45
Ser Gly Ile Cys Gly Arg Val Asp Thr Ala Ala Val Cys Leu Gly Pro
                               50                              55                              60
Pro Ser Ala Val Asn Val Thr Trp Gly Arg Ser Thr Asp Val Glu His

```

80

```
<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.
```

```
<210> 43974
<211> 162
<212> PRT
<213> A.fumigatus
```

<210> 43975



19865

<211> 224  
<212> PRT  
<213> A.fumigatus

<400> 43975  
Lys Gln Arg Val Arg Tyr Ala Pro Tyr Leu Lys Lys Leu Arg Thr Gly  
1 5 10 15  
Glu Gln Cys Ile Asp Leu Phe Lys His Gly Arg Tyr Leu Gly Trp Ser  
20 25 30  
Gly Phe Thr Gly Val Gly Ala Pro Lys Val Ile Arg Asn Thr Leu Val  
35 40 45  
Asp His Val Glu Lys Asn Asn Leu Gln Gly Lys Leu Arg Phe His Leu  
50 55 60  
Phe Val Gly Thr Ser Ala Gly Pro Glu Glu Ser Arg Trp Ala Glu Asn  
65 70 75 80  
Asn Met Ile Leu Thr Arg Ala Pro His Gln Val Gly Lys Pro Ile Ala  
85 90 95  
Ala Ala Ile Asn Asp Gly Arg Thr Gln Phe Phe Asp Lys His Leu Ser  
100 105 110  
Met Phe Pro Gln Asp Leu Thr Tyr Gly Phe Tyr Thr Lys Asp Lys Pro  
115 120 125  
Asn Gly Ser Asn Leu Asp Tyr Thr Ile Ile Glu Ala Thr Ala Ile Thr  
130 135 140  
Glu Asp Gly Ser Ile Val Pro Gly Pro Ala Val Gly Ala Ser Pro Glu  
145 150 155 160  
Met Ile Ser Val Ser Asp Lys Ile Ile Ile Glu Val Asn Thr Lys Thr  
165 170 175  
Pro Ser Phe Glu Gly Ile His Asp Ile Asp Met Pro Val Asn Pro Pro  
180 185 190  
Phe Arg Gln Pro Tyr Pro His Thr Ser Ala Asp Phe Lys Ile Gly Lys  
195 200 205  
Thr Ala Ile Pro Val Asp Pro Val Phe Thr Thr Ala Leu Glu Gly Ala  
210 215 220

<210> 43976  
<211> 60  
<212> PRT  
<213> A.fumigatus

<400> 43976  
Leu Ile Ala Met Arg Pro Ser Asn Asn Trp Asp His Gly Val Asp Ser  
1 5 10 15  
Pro Gln Tyr Ser Phe Thr Asn Val Lys Lys Met Glu Pro Leu Val Asp  
20 25 30  
Ile Arg Ile Gln His Trp Ile Asp Lys Leu Asn Glu Lys Phe Ala Gln  
35 40 45  
Thr Gly Glu Ile Phe Asp Phe Ser Trp Trp Ala Val  
50 55 60

<210> 43977  
<211> 92  
<212> PRT  
<213> A.fumigatus

<400> 43977  
Trp His Val Cys Ser Tyr Met Ala Tyr Asp Ile Ile Ser Glu Ile Gly

## 19866

```

1           5           10           15
Leu Gly Ala Pro Phe Gly Phe Val Glu His Gly Gln Asp Val Cys Gly
                20                25                30
Leu Ile His Gly Phe His Asp Gly Leu Pro Ala Tyr Gly Leu Leu Ala
                35                40                45
Arg Leu His Pro Phe Thr Asn Trp Met Asn Thr Thr Phe Met Asn Lys
                50                55                60
Tyr Leu Val Ala Thr Pro Gln Asp Asp Ser Gly Ile Gly Val Leu Met
65                70                75                80
Arg Phe Arg Asp Arg Leu Ile His Gln Arg Phe Arg
                85                90

```

<210> 43978  
 <211> 137  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43978
Leu Tyr Lys Arg Gly Arg Val Glu Leu Ser Trp Val Lys Thr Arg Cys
1           5           10           15
Val Gly Thr Ser His Thr Asn Gly Tyr His Met Ser Thr His Pro Tyr
                20                25                30
Leu Ile Gln Ser Phe His Pro Asn Pro Ile Phe Ile Gly Ser Glu Ile
                35                40                45
Val Ala Gln Leu Leu Leu His Asn Val Arg Lys Val Tyr Ile Val Ala
                50                55                60
Arg Ser Lys Ser Lys Tyr Leu Arg Ala Gln Glu Asn Trp Arg Gln Arg
65                70                75                80
His Gly Ile Val Leu Ser Glu Asn Asp Asp Arg Leu Glu Phe Ile Gln
                85                90                95
Cys Asp Leu Gly Asp Ile Lys Ser Val Lys Asp Ala Ala Asp Glu Ile
                100                105                110
Thr Ala Lys Thr Asp Arg Leu Asp Ile Leu Ile Cys Asn Ala Gly Lys
                115                120                125
Leu Ser Arg Ser Thr Ala Gln Pro Leu
                130                135

```

<210> 43979  
 <211> 93  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43979
Ser Phe Cys Arg Leu Gln Gln Ser Lys Arg Leu Arg Ser Arg Ala Arg
1           5           10           15
Lys Leu Thr Cys Ile Ala Tyr Gln Asp Val Gln Ser Val Cys Leu Gly
                20                25                30
Arg Asn Leu Ile Arg Cys Ile Leu Tyr Gly Phe Asp Val Ser Gln Ile
                35                40                45
Ala Leu Asn Glu Phe Gln Pro Val Val Ile Leu Ala Glu Asn Tyr Thr
                50                55                60
Met Ala Leu Ser Pro Val Leu Leu Cys Ser Glu Val Leu Ala Leu Ala
65                70                75                80
Ser Arg Tyr Asn Val Asp Phe Pro Asn Ile Val Gln Glu
                85                90

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19867

<210> 43980  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (1), (8), (82)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43980  
 Xaa Tyr Gly Pro Ala Cys Glu Xaa Thr Tyr Gly Pro Arg Pro Val Met  
 1 5 10 15  
 Leu Pro Cys Ile Phe Leu Cys Leu Phe Ser Leu Cys Met Thr Ser Leu  
 20 25 30  
 Ala Thr Glu Tyr Tyr Gln Ile Ile Leu Ala Gln Gly Ile Gly Tyr Gly  
 35 40 45  
 Leu Gly Ala Gly Gly Ile Phe Thr Thr Cys Leu Val Cys Val Ser Gln  
 50 55 60  
 Trp Phe Val Lys Gln Arg Gly Leu Ala Leu Gly Ile Thr Val Ala Gly  
 65 70 75 80  
 Ser Xaa Ile Gly Glu Trp Gln Thr Ile Leu Ser Val Ser Met Ala Cys  
 85 90 95

<210> 43981  
 <211> 114  
 <212> PRT  
 <213> A.fumigatus

<400> 43981  
 Ser Asp Val Gly Leu Gly Gly Val Ile Phe Pro Phe Phe Leu Arg Leu  
 1 5 10 15  
 Val Met Glu Asp Val Gly Phe Asn Gly Met Ile Arg Tyr Thr Ala Leu  
 20 25 30  
 Phe Leu Gly Ile Ile Leu Val Gly Ala Phe Phe Leu Leu Ser Ala Arg  
 35 40 45  
 Leu Pro Pro Lys Lys Trp Asp Ser Glu Met Ala Trp Ile Asp Phe Arg  
 50 55 60  
 Val Phe Gln Asn Arg Gly Phe Ala Phe Tyr Cys Leu Gly Ser Tyr Leu  
 65 70 75 80  
 Val Met Trp Gly Leu Trp Ala Pro Phe Asp Tyr Leu Pro Ser Met Ala  
 85 90 95  
 Gln Leu Ser Gly Met Ser Asp Ser Leu Ala Leu Tyr Leu Leu Ala Ile  
 100 105 110  
 Val Lys

<210> 43982  
 <211> 186  
 <212> PRT  
 <213> A.fumigatus

<400> 43982  
 Tyr Leu Asn Pro Leu Ser Gln Leu Leu Gln Phe Val Asn Pro Thr Tyr  
 1 5 10 15  
 Glu Ile Ile Asp Gly Asp Ser Asn Ser Glu Tyr Ser Arg Leu Glu Gln

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<210> 43983
<211> 209
<212> PRT
<213> A.fumigatus
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[illegible]

<210> 43984  
 <211> 291  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (259)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 43984

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asn | Cys | Gly | Pro | Ser | Thr | Pro | Gly | Val | Lys | Leu | Ser | Tyr | Ser | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Lys | Ile | Leu | Thr | Tyr | Ala | Ser | Asn | Leu | Leu | Asp | Trp | Met | Ser | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Phe | Thr | Lys | Glu | Trp | Glu | Glu | Leu | Ser | Ser | Val | Pro | Phe | Asn | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Lys | Val | Asp | Leu | Leu | Leu | Asp | Pro | Ser | Glu | Leu | Leu | Lys | Leu | Ser |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Pro | Lys | Ile | Val | Phe | Cys | Ser | Gly | Ile | Asp | Leu | Arg | Ser | Gly | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Ser | Ala | Glu | Ala | Phe | Gln | Tyr | Leu | Cys | Asn | Asp | Asp | Arg | Thr | Thr |
|     |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     | 95  |     |
| Ile | Ile | Leu | Thr | Glu | Lys | Thr | Thr | Met | Asn | Phe | Ala | Ser | Ser | Leu | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Val | Leu | Tyr | Thr | Glu | Trp | Asp | Ser | Leu | Ala | Lys | Lys | Arg | Gly | Gly |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Glu | Ser | Glu | Asp | Gly | Ile | Ala | Val | Pro | Ile | Asp | Lys | Asn | Ile | Ser |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Lys | Asn | Trp | Thr | Lys | Glu | Val | Glu | Leu | Thr | Gly | Thr | Glu | Leu | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Glu | Phe | Gln | Glu | Lys | Val | Ala | Gln | Lys | Arg | Lys | Glu | Lys | Leu | Leu | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Lys | Val | Arg | Asp | Gln | Lys | Asn | Gln | Asn | Ile | Leu | Ser | Ala | Asp | Thr | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | Ser | Glu | Glu | Ser | Ser | Asp | Asp | Asp | Asp | Glu | Gly | Asp | Asn | Glu | Ala |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Glu | Lys | Gln | Lys | Gly | Asn | Thr | Ser | Ser | Asn | Leu | Leu | Ile | Lys | Gln | Tyr |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Gln | Asn | Ile | Asn | Val | Ala | Asp | Ser | Asn | Val | Ala | Pro | Asn | Glu | Ile | Asn |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |
| Pro | Leu | Ala | Thr | His | Glu | Ala | Phe | Ile | Thr | Asp | His | Ile | Lys | Gln | Ser |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Leu | Glu | Xaa | Asn | Leu | Pro | Ile | Asp | Leu | Lys | Ile | Thr | His | Lys | Leu | Arg |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Pro | Arg | Thr | Ala | Thr | Phe | Pro | Tyr | Phe | Ala | Thr | Ala | His | Lys | Gln | Lys |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |
| Phe | Asp | Glu |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 290 |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 43985  
 <211> 101  
 <212> PRT  
 <213> A.fumigatus

## 19870

&lt;400&gt; 43985

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Ser Thr Glu Leu Lys Leu Leu Ala Lys Phe Ile Val Val Phe Ser Val
1          5          10          15
Lys Ile Ile Val Val Arg Ser Ser Leu His Lys Tyr Trp Lys Ala Ser
          20          25          30
Ala Asp Ile Ser Pro Leu Arg Lys Ser Ile Pro Glu Gln Asn Thr Ile
          35          40          45
Leu Gly Pro Leu Ser Phe Asn Asn Ser Leu Gly Ser Ser Asn Lys Ser
          50          55          60
Thr Phe Glu Gly Leu Lys Gly Thr Leu Asp Asn Ser Ser His Ser Leu
65          70          75          80
Val Lys Leu Leu Asp Ile Gln Ser Asn Arg Leu Asp Ala Tyr Val Asn
          85          90          95
Ile Leu Val Pro Glu
          100

```

&lt;210&gt; 43986

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (197)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 43986

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Gln Leu Ile Ser Ile Asp Leu Leu Ser Pro Thr Thr Met Leu His Ile
1          5          10          15
Glu Gln Asn Asn Leu Leu Ile Glu Lys Thr Leu Thr Glu Arg Leu Phe
          20          25          30
Pro Asn Pro Ser Glu Ser Ser Leu Lys Ser Leu Asp Arg Ile Val Ser
          35          40          45
Asp Phe Asp Phe Thr Thr Phe His Leu Leu Thr Leu Pro Gly Glu Lys
          50          55          60
His Leu Leu Leu Ile Ser Leu Ser Leu Arg Cys Trp Pro Asp Leu Val
65          70          75          80
Lys His Asp Val Val Lys Tyr Leu Asn Asp Lys Tyr Gln Pro Phe Asn
          85          90          95
Glu Val Leu Thr Ile Leu Ser Thr Asn Asp Val Glu Gln Gly Tyr Asp
          100          105          110
Tyr Ser Leu Val Leu Asp Thr Ser Thr Ala Thr Thr Ser Ser Asn Tyr
          115          120          125
Asp Glu Asp Phe Lys Leu Gln Leu Ile Lys Glu Leu Ser Asn Leu Lys
          130          135          140
Arg Asn Ala Met Ala Ala Pro Phe Glu Gln Ala Phe Asn Arg Tyr Asp
145          150          155          160
Glu Leu Leu Lys Lys Tyr Ala Asn Ala Asn Thr Tyr Ser Glu Glu Ile
          165          170          175
Gln Gln Glu Leu Phe Asn Glu Pro Val Ser Val Ile Lys Tyr Arg Gly
          180          185          190
Ile Asp Glu Cys Xaa Leu Leu Lys Pro Ser Phe Asp Lys Val Thr Val
          195          200          205
Ile Phe Ser Thr Val Phe Gln Asp Glu Thr Asp Lys Ile Phe Gly Lys
          210          215          220
Val Phe Tyr Lys Asn Leu Leu Met Leu Gly Lys Asp Gln Phe Lys Leu

```

| Parameter                          | Value | Unit         | Source |
|------------------------------------|-------|--------------|--------|
| Age                                | 1.2   | Myr          | 1      |
| Mass                               | 0.001 | $M_{\odot}$  | 1      |
| Radius                             | 0.001 | $R_{\odot}$  | 1      |
| Temperature                        | 1000  | K            | 1      |
| Surface gravity                    | 100   | $m/s^2$      | 1      |
| Escape velocity                    | 100   | $m/s$        | 1      |
| Equilibrium temperature            | 1000  | K            | 1      |
| Stellar flux                       | 1000  | $W/m^2$      | 1      |
| Stellar wind velocity              | 1000  | $m/s$        | 1      |
| Stellar wind density               | 1000  | $kg/m^3$     | 1      |
| Stellar wind pressure              | 1000  | $N/m^2$      | 1      |
| Stellar wind momentum flux         | 1000  | $N/m^2$      | 1      |
| Stellar wind energy flux           | 1000  | $W/m^2$      | 1      |
| Stellar wind mass flux             | 1000  | $kg/s$       | 1      |
| Stellar wind angular momentum flux | 1000  | $kg m^2/s^2$ | 1      |
| Stellar wind torque                | 1000  | $N m$        | 1      |
| Stellar wind power                 | 1000  | $W$          | 1      |
| Stellar wind luminosity            | 1000  | $W$          | 1      |
| Stellar wind efficiency            | 1000  | %            | 1      |
| Stellar wind conversion factor     | 1000  |              | 1      |
| Stellar wind constant              | 1000  |              | 1      |
| Stellar wind parameter             | 1000  |              | 1      |
| Stellar wind variable              | 1000  |              | 1      |
| Stellar wind function              | 1000  |              | 1      |
| Stellar wind operator              | 1000  |              | 1      |
| Stellar wind attribute             | 1000  |              | 1      |
| Stellar wind property              | 1000  |              | 1      |
| Stellar wind characteristic        | 1000  |              | 1      |
| Stellar wind trait                 | 1000  |              | 1      |
| Stellar wind feature               | 1000  |              | 1      |
| Stellar wind aspect                | 1000  |              | 1      |
| Stellar wind view                  | 1000  |              | 1      |
| Stellar wind position              | 1000  |              | 1      |
| Stellar wind location              | 1000  |              | 1      |
| Stellar wind direction             | 1000  |              | 1      |
| Stellar wind orientation           | 1000  |              | 1      |
| Stellar wind alignment             | 1000  |              | 1      |
| Stellar wind configuration         | 1000  |              | 1      |
| Stellar wind arrangement           | 1000  |              | 1      |
| Stellar wind distribution          | 1000  |              | 1      |
| Stellar wind pattern               | 1000  |              | 1      |
| Stellar wind form                  | 1000  |              | 1      |
| Stellar wind shape                 | 1000  |              | 1      |
| Stellar wind structure             | 1000  |              | 1      |
| Stellar wind organization          | 1000  |              | 1      |
| Stellar wind system                | 1000  |              | 1      |
| Stellar wind mechanism             | 1000  |              | 1      |
| Stellar wind process               | 1000  |              | 1      |
| Stellar wind method                | 1000  |              | 1      |
| Stellar wind technique             | 1000  |              | 1      |
| Stellar wind approach              | 1000  |              | 1      |
| Stellar wind strategy              | 1000  |              | 1      |
| Stellar wind policy                | 1000  |              | 1      |
| Stellar wind plan                  | 1000  |              | 1      |
| Stellar wind program               | 1000  |              | 1      |
| Stellar wind project               | 1000  |              | 1      |
| Stellar wind initiative            | 1000  |              | 1      |
| Stellar wind campaign              | 1000  |              | 1      |
| Stellar wind effort                | 1000  |              | 1      |
| Stellar wind work                  | 1000  |              | 1      |
| Stellar wind task                  | 1000  |              | 1      |
| Stellar wind job                   | 1000  |              | 1      |
| Stellar wind role                  | 1000  |              | 1      |
| Stellar wind function              | 1000  |              | 1      |
| Stellar wind purpose               | 1000  |              | 1      |
| Stellar wind goal                  | 1000  |              | 1      |
| Stellar wind aim                   | 1000  |              | 1      |
| Stellar wind objective             | 1000  |              | 1      |
| Stellar wind result                | 1000  |              | 1      |
| Stellar wind outcome               | 1000  |              | 1      |
| Stellar wind effect                | 1000  |              | 1      |
| Stellar wind impact                | 1000  |              | 1      |
| Stellar wind influence             | 1000  |              | 1      |
| Stellar wind power                 | 1000  |              | 1      |
| Stellar wind force                 | 1000  |              | 1      |
| Stellar wind strength              | 1000  |              | 1      |
| Stellar wind intensity             | 1000  |              | 1      |
| Stellar wind magnitude             | 1000  |              | 1      |
| Stellar wind brightness            | 1000  |              | 1      |
| Stellar wind luminosity            | 1000  |              | 1      |
| Stellar wind energy                | 1000  |              | 1      |
| Stellar wind power                 | 1000  |              | 1      |
| Stellar wind flux                  | 1000  |              | 1      |
| Stellar wind density               | 1000  |              | 1      |
| Stellar wind pressure              | 1000  |              | 1      |
| Stellar wind momentum              | 1000  |              | 1      |
| Stellar wind energy                | 1000  |              | 1      |
| Stellar wind power                 | 1000  |              | 1      |
| Stellar wind flux                  | 1000  |              | 1      |
| Stellar wind density               | 1000  |              | 1      |
| Stellar wind pressure              | 1000  |              | 1      |
| Stellar wind momentum              | 1000  |              | 1      |
| Stellar wind energy                | 1000  |              | 1      |
| Stellar wind power                 | 1000  |              | 1      |
| Stellar wind flux                  | 1000  |              | 1      |
| Stellar wind density               | 1000  |              | 1      |
| Stellar wind pressure              | 1000  |              | 1      |
| Stellar wind momentum              | 1000  |              | 1      |
| Stellar wind energy                | 1000  |              | 1      |
| Stellar wind power                 | 1000  |              | 1      |
| Stellar wind flux                  | 1000  |              | 1</    |

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<210> 43987
<211> 181
<212> PRT
<213> A.fumigatus
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<210> 43988
<211> 177
<212> PRT
<213> A.fumigatus
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|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> | 43988 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Arg   | Asn   | Asp | Thr | Pro | Gly | Val | Phe | Leu | Pro | Thr | Thr | Lys | Asn | Ala | Glu |  |
| 1     |       |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Thr   | Met   | Leu | Ser | Leu | Ala | Leu | Val | Gly | Cys | Ile | Asn | Glu | Ser | Phe | Ile |  |
|       |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Asp   | Pro   | Val | Ile | Leu | Ala | Asp | Tyr | Leu | Leu | Tyr | Val | Leu | Asn | Leu | Gln |  |
|       |       | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Asp   | Pro   | Thr | Gly | Lys | Leu | Tyr | Thr | Asp | Tyr | Ile | Asp | His | Pro | Thr | Asn |  |
|       | 50    |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Asn   | Val   | Tyr | Glu | Leu | Leu | Glu | Ser | Ile | Asp | Gln | Lys | Arg | Asn | Val | Leu |  |
| 65    |       |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Gln   | Ile   | Asp | Lys | Arg | Phe | Asp | Glu | Cys | Gly | Leu | Ala | Asn | His | Trp | Ile |  |
|       |       |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Ser   | Lys   | Trp | Lys | Gln | Gly | Lys | Ser | Leu | Lys | Tyr | Arg | Gly | Leu | Phe | Asp |  |
|       |       |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Val   | Ala   | Ala | Ile | His | Glu | Ile | Asn | Ala | Lys | Asp | Phe | Gly | Asn | Leu | Thr |  |

## 19872

```

      115              120              125
Asn Ala Glu Arg Glu Arg Ile Gly Leu Ser Asn Val Gln Gln Arg Leu
      130              135              140
Gln Glu Arg Phe Gly Asp Asp Gly Thr Ser Thr Ser Lys His Arg Lys
      145              150              155              160
Arg Thr Ala Lys Asp Arg Glu Cys Asp Met Lys Asn Arg Leu Phe Lys
      165              170              175
Leu

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<210> 43989  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

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<400> 43989
Thr Ala Asp Pro Lys Lys Ala Asp Thr Ile Thr Ile Glu Leu Gln Lys
1              5              10              15
Lys Leu Asp Val Lys Tyr Lys Thr Gln His Lys Leu Glu Lys Lys Ser
      20              25              30
Lys Pro Phe Ile Ala Thr Ser Lys Pro Gln Pro Asn Asp Gly Lys Phe
      35              40              45
Gly Glu Tyr Phe Asp Ile Glu Asp Ile Leu Glu Asp
      50              55              60

```

<210> 43990  
 <211> 169  
 <212> PRT  
 <213> A.fumigatus

```

<400> 43990
Ser Ile Ser Ile Asn Asn Gln Arg Asn Tyr His Ser Ser Gly Lys Trp
1              5              10              15
Asp Leu Thr Leu Asp Glu Leu Trp Ala Phe Ile Gln Thr Lys Phe Asn
      20              25              30
Gln Gln Asp Gln Leu Asp Glu Phe Gln Lys Gln Leu Ile Trp Gln Trp
      35              40              45
Leu Phe Val Ala Glu Asp Glu Glu Gly Asn Ser Glu Ser Ala Lys Ile
      50              55              60
Tyr Val Thr Tyr Asn Asp Ser Pro Val Thr Ala Asn Ser Asp Asn Lys
      65              70              75              80
Ile Phe Val Ala Ser Tyr Asp Asp Leu Asn Asn Ile Arg Val Leu Pro
      85              90              95
Glu Gln Glu Thr Gln Val Leu Tyr Leu Thr Gly Ile Thr Asn Asn Lys
      100             105             110
Lys Phe Leu Ser Ser Phe Gly Asp Lys Pro Tyr Glu Leu Leu Gln Glu
      115             120             125
Ile Ala Ile His Gly Ser Lys Gly Ile Trp Ala Pro Thr Leu Ile Asp
      130             135             140
Ile Thr Gly Gln Asp Asn Arg Ser Leu Thr Gly Arg Leu Asn Lys Leu
      145             150             155             160
Glu Glu Trp Arg Leu Ile Tyr Arg Glu
      165

```

<210> 43991  
 <211> 141



19873

<212> PRT

<213> A.fumigatus

<400> 43991

```

Cys Asn Glu Gly Asn Lys Tyr Met Ile Phe His Phe Asn Gln Lys Glu
1          5          10          15
Lys Ala Asp Ser Ser Lys Cys Asn Thr Ile His Val Arg Lys Ser Ile
          20          25          30
Glu Asn Trp Ala Ile Ile Leu Leu Tyr Ile Leu Phe Val Trp Tyr Arg
          35          40          45
Lys Ser Glu Leu His Tyr Asp His Ile Ile His Thr Asn Leu Trp Gly
          50          55          60
Val Glu Lys Asn Lys Pro Pro Phe Leu Phe Gln Thr Lys Asn Ser Ile
65          70          75          80
Pro Arg Leu Leu Gln Phe Ser Ile Pro Thr Gln Pro Thr Ala Ile Thr
          85          90          95
Gln Thr Met Leu Tyr His Leu Asn Ile Leu Ser Val Leu Ser Arg Ser
          100          105          110
Pro Ser Pro Leu Pro Gln Thr Gln Pro Gln Pro Leu Glu Gln Glu Leu
          115          120          125
Leu Leu Ser Ser Ser His Pro Lys Ser Ala Thr Arg Arg
          130          135          140

```

<210> 43992

<211> 121

<212> PRT

<213> A.fumigatus

<400> 43992

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Arg Phe Ser Asn Thr Met Ser Thr Cys Ala Glu Lys Val Ile Asp Phe
1          5          10          15
Glu Ile Lys Phe Glu Asn Glu Asp Asn Ala Glu Lys Phe Arg Ala Asn
          20          25          30
Leu Pro Asn Gln Pro Asp Val Lys Pro Leu Thr His Val Glu Asn Met
          35          40          45
Gln Thr Thr Ile Asp Arg Ile Asp Ala Gln Leu Asp Gly Leu Tyr Lys
          50          55          60
Ala Met Gln Tyr Tyr Lys Thr Arg Asn Asn Arg Asn Gln Ala Thr Val
65          70          75          80
Val Ser Thr Glu Ser Arg Ile Tyr Tyr Phe Ser Ile Phe Glu Val Leu
          85          90          95
Leu Met Val Gly Met Gly Phe Leu Gln Ile Thr Ile Val Gln Leu Phe
          100          105          110
Phe Arg Gly Ser Arg Lys Gln Leu Val
          115          120

```

<210> 43993

<211> 95

<212> PRT

<213> A.fumigatus

<400> 43993

```

Thr Ala Ile Phe Val Pro Asn Lys Lys Leu Asn Thr Ser Ile Thr Ser
1          5          10          15
Ile Leu Tyr Thr Asn Pro Thr Tyr Cys His Asn Thr Asn Asn Val Ile
          20          25          30

```

## 19874

Ser Ser Lys Tyr Thr Ile Cys Ile Ile Thr Ile Ser Ile Thr Thr Ala  
 35 40 45  
 Thr Asn Thr Thr Ala Thr Thr Gly Thr Gly Thr Thr Ala Val Ile Phe  
 50 55 60  
 Ser Ser Lys Ile Ser Asn Ser Lys Met Ile Asn Leu Pro Glu Glu Ser  
 65 70 75 80  
 Asp Val Pro Val Ser Asn Ile Thr Leu Leu Leu Gly Asn Arg Leu  
 85 90 95

&lt;210&gt; 43994

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43994

Leu Tyr Ile Phe Gly Tyr Asn Ala Leu Leu Lys Arg Asp Ala Met His  
 1 5 10 15  
 Tyr Glu Lys Ser Phe Glu Ser Lys Gly Gln His His Phe Tyr Ile Val  
 20 25 30  
 Leu Arg Gln Thr Tyr Phe Val Val Leu Asn Ser Thr Ile His Asn Ile  
 35 40 45  
 Val Thr Arg Ile Pro Gln Asp Ile Leu Ser Tyr Thr Ile Tyr Thr Asn  
 50 55 60  
 Asn Thr Ile Tyr Lys Thr Val Ser Ser Asn Pro Asn Lys Ser Gln Ser  
 65 70 75 80  
 Phe Tyr Asn Asp Lys Trp Val Leu Ile Ser Leu Met Leu Gly Gly His  
 85 90 95  
 Lys Thr Asp Gln Leu Ser Ala Leu Leu Phe Thr Ser Arg  
 100 105

&lt;210&gt; 43995

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43995

Lys Leu Cys Ile Pro Glu Thr His Gln Lys Lys Ile Lys Lys Tyr Gln  
 1 5 10 15  
 Ala Met Lys Ile Ser Ser Asn Leu Ile Ser Leu Ile Asn Lys Pro Ile  
 20 25 30  
 Arg Ile Val Pro Leu Met Ser Val Asn Lys Lys Ile Lys Leu Asp Asn  
 35 40 45  
 Met Val Lys Ile Cys Thr His Ser Gly Ser Phe His Ala Asp Glu Ser  
 50 55 60  
 Leu Ala Val Tyr Leu Leu Lys Leu Leu Pro Lys Tyr Ser Gln Ala Glu  
 65 70 75 80  
 Leu Val Arg Ser Arg Asn Pro Glu Asp Trp Glu Ser Ser Asp Ile Val  
 85 90 95  
 Val Asp Val Ser Gly Lys Tyr Asp Gly Val Lys Tyr Phe Asp His His  
 100 105 110  
 Gln Arg Glu Phe Asp Thr Thr Phe Asn Glu Asn Tyr Lys Thr Lys Leu  
 115 120 125  
 Ser Ser Ala Gly Leu Val Tyr Lys His Phe Gly Lys Val Phe Thr Thr  
 130 135 140  
 Gly Val Glu Gly Pro His  
 145 150

<210> 43996  
 <211> 89  
 <212> PRT  
 <213> A.fumigatus

<400> 43996  
 Cys Lys Thr Gly Leu Ser Leu Pro Met Cys Arg Ile Val Val Ala Gly  
 1 5 10 15  
 Asp Pro Arg Met Gln Leu Ser Ala Tyr Pro Ile Glu Thr Pro Trp Val  
 20 25 30  
 Ala Ser Ser Ile Glu Ile Leu His Ile Asn Thr Arg Val Val Trp Leu  
 35 40 45  
 Leu Ser His Ile Thr Asp Leu Glu Gln Leu Glu Lys Val Leu Leu Asn  
 50 55 60  
 Val Thr Gln Gln Trp Gly His Gly Thr Asn Leu Ser Lys Leu Asn Val  
 65 70 75 80  
 Ser Ala Ser Gln Ser Asn Leu Thr Phe  
 85

<210> 43997  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 43997  
 Leu Arg Leu Leu Arg Pro Pro Val Cys Glu His Arg Trp Val Lys Arg  
 1 5 10 15  
 Glu Leu Ser Thr Asn Pro Gln Leu Ile Leu Asp Ala Gly Gly Val Gly  
 20 25 30  
 Val Leu Ser Tyr Gln His His Asn Val Asp Glu Pro Ala Ile Tyr Leu  
 35 40 45  
 Ala Gly Ala Phe Thr Val Pro Val Glu Glu Glu Gly Ala Asp Ile  
 50 55 60

<210> 43998  
 <211> 200  
 <212> PRT  
 <213> A.fumigatus

<400> 43998  
 Asn Ile Asn Gln Cys Cys Pro Glu Leu Lys Thr Lys Thr Pro Gly Val  
 1 5 10 15  
 Thr Gln Gln Ile Lys Trp Val Ser Ile Met Gly Gly Ser Phe Gly Phe  
 20 25 30  
 Gly Asn Lys Thr Pro Tyr Ala Glu Phe His Val His Thr Asp Gln His  
 35 40 45  
 Ala Ala Lys Leu Val Ile Gln Glu Leu Ser Asn Lys Val Val Tyr Ser  
 50 55 60  
 Pro Trp Asn Phe Thr His Lys Val Ile Ala Thr Ser Glu Ile Arg Lys  
 65 70 75 80  
 His Met Tyr Asp Asp Asn Asn Glu Lys Arg Ser Ser Pro Ile Arg Asn  
 85 90 95  
 Val Leu Phe Arg Ile Trp Thr Phe Tyr Asp Arg Val Tyr Ala Ala Asn  
 100 105 110  
 Gly Phe Leu Glu Gly Pro Pro Ile His Asp Pro Leu Ala Val Tyr Ser

## 19876

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 115 |     | 120 |     | 125 |     |     |     |     |     |     |     |     |     |     |
| Leu | Cys | Pro | Phe | Phe | Asn | Ser | Phe | Glu | Arg | Tyr | Gly | Tyr | Thr | Cys | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gln | Lys | Asn | Ile | Asp | Ile | Ile | Thr | Glu | Gly | Val | Arg | Met | Gly | Glu | Ser |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | Ile | Val | Glu | Gly | Gly | Asn | Thr | Asp | Lys | Gly | Val | Tyr | Ile | Gly | Glu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala | Ile | Asp | Asn | Lys | Lys | Phe | Trp | Asp | Ser | Ile | Leu | Leu | Ala | Leu | Gln |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asn | Ala | Asp | Leu | Gln | Thr | Lys | Asn |     |     |     |     |     |     |     |     |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     |     |     |     |     |

&lt;210&gt; 43999

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 43999

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Phe | Ser | Phe | Phe | Val | Asn | His | Trp | Phe | Tyr | Thr | Met | Ser | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Thr | Thr | Leu | Phe | Asn | Val | Arg | Ile | Tyr | Tyr | Asn | Ser | Phe | Ile | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Thr | Leu | Thr | Glu | Asn | Gly | Leu | Arg | Leu | Val | Pro | Asn | Phe | Phe | Gly |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Phe | Ser | Phe | Gly | Ser | Val | Gly | Ala | Gly | Ile | Tyr | Met | Lys | Lys | Thr | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Tyr | Tyr | Lys | Leu | Ala | Val | Leu | Ala | Gly | Ile | Phe | Ala | Ile | Tyr | Gly |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ile | Gly | Lys | Ile | Ala | Leu | Leu | Thr | Pro | Asn | Ile | Pro | Thr | Trp | Gln | Gln |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Phe | Leu | Leu | Leu | Ile | Pro | Ser | Gly | Leu | Gly | Tyr | Ser | Cys | Ile | Leu | Thr |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Thr | Leu | Leu | Ala | Leu | Ile | Ala | Ala | Pro | Leu | Lys | Tyr | Gln | Ala |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     | 125 |     |     |     |     |
| Cys | Thr | Thr | Ser | Ile | Gln | Tyr | Thr | Phe | Arg | Ser | Thr | Gly | Cys | Thr | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Val | Ser | Ala | Ala | Thr | Ala | Val | Phe | Gln | Asn | Val | Leu | Leu | Leu | Gln |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Thr | Lys | Lys | Ile | Asn | Glu | Leu | Val | Ser | Asp | Pro | Arg | Glu | Ala | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Lys | Ile | Ile | Ala | Lys | Ala | Leu | Asp | Ser | Thr | Glu | Tyr | Val | Asn | Glu | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Pro | Lys | Tyr | Val | Arg | Glu | Ala | Ile | Arg | Ala | Ser | Tyr | Asp | Ala | Gly | Cys |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Lys | Gly | Ala | Phe | Gly | Phe | Ala | Phe | Ala | Thr | Ile | Val | Leu | Gly | Val | Ile |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ser | Ser | Leu | Phe | Met | Arg | Glu | His | Val | Leu | His | Thr | Ser | Ile | Asn | Arg |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Asp |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 44000

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19877

<400> 44000

```

Thr Asn His Thr Thr Ala Ser Thr Leu Ile Leu Pro Ile Asn Cys Thr
1          5          10          15
Asn Met Asn Thr Phe Ser Ser Pro Pro Asn Val Ile Arg Glu Tyr Asn
          20          25          30
Asp Ser Thr Tyr Gln Leu Pro Leu Asn Ser Gln Phe His Gln Ser Pro
          35          40          45
Phe Leu Gln Thr Gln Ser Pro Asp Tyr Val Ser Leu Arg Glu Glu Glu
          50          55          60
Asp Asp Asn Asn Asp Lys Asn Leu Asp Ile Met Ser Ser Cys Ile Val
65          70          75          80
Asp Ser Val Ile Tyr Lys Ser Gln Lys Ile Ala Gly Pro Leu Leu Ser
          85          90          95
Gln Ile Ser Asn Leu Asn Ile Gln Gln Ala Leu Ile Ile Arg Glu Leu
          100          105          110
Leu Phe Thr Leu Leu Gly His Glu Gly His Tyr Ile Gln Tyr Ser Lys
          115          120          125
Arg Tyr Asp Pro Thr Ser Gln Ile Ser Arg Ile Glu Gly Pro Asp Tyr
          130          135          140
Lys Ile Ala Lys Asn Leu Asp Ile Ser Leu Lys Val Ile Thr Lys Lys
145          150          155          160
Leu Val Lys Phe Gly Lys Ser Tyr Ser Gly
          165          170

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<210> 44001

<211> 62

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (47)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44001

```

Lys Ser Phe Ile Gln Val Phe Asp Asn Asn Lys Phe Gly Lys Ile Val
1          5          10          15
Gln Lys Phe Cys Ser Glu Met Lys Lys Phe Leu Ser Ser His Gln Gln
          20          25          30
Val Leu Ile Asn Val Glu His Glu Phe Lys Phe Asn Lys Asn Xaa Asn
          35          40          45
Leu Asn Met Leu Gly Ser Ala Leu Thr Ser Arg Asn Phe Gln
          50          55          60

```

<210> 44002

<211> 279

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (252)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44002

```

Lys Cys Gly Ser Phe Gln Arg Arg Trp Trp Lys Lys Asn Ile Ala Met

```

## 19878

```

1           5           10           15
Ile Glu Phe Pro Asn Leu Leu Ile Ala Lys Thr Ala Thr Ala Pro Gly
20           25           30
Ala His Ile Arg Leu Thr Asn Tyr Ser Ser Ser Phe Ile Val Arg Ala
35           40           45
Phe Lys Gln Leu Ile Pro Asn Tyr His Pro Tyr Thr Leu Val Ser Phe
50           55           60
Pro Thr Asp Lys Tyr Gln Arg Leu Ile Ile Arg Lys Ser Asn Phe Lys
65           70           75           80
Leu Tyr Asn Met Arg Arg Tyr Met Ile Ala Gly Ser Tyr Asp Pro His
85           90           95
Leu Leu Phe Ile Gly Ser Lys Ser Ser Gln Asn Phe Ser Leu Ser Lys
100          105          110
Leu Leu Val Asn Ala Lys Arg Leu Leu Ile Val Ile Gly Gly Ser Ala
115          120          125
Ile Ser Phe Ala Leu Pro Ile Leu Arg Val Met Asn Tyr His Gly Ile
130          135          140
Pro Thr Lys Ile Val Trp Val Ile Lys Asp Phe Arg Asp Val Leu Val
145          150          155          160
Leu Arg Tyr Phe Asp Gly Phe Ile His Gly Asp Asp Phe Glu Ile Phe
165          170          175
Ile Thr Gly Asp Ser Thr Ile Lys Glu Gln Ala Lys Thr Leu Arg Asn
180          185          190
Ala Ile Ser Cys Ala Ser Asn Phe Ser Lys Lys Ser Arg Ile Ser Ser
195          200          205
His Phe Asp Ile Glu His Asp Glu Thr Ser Pro Leu Leu Ser Asp Asn
210          215          220
Asn Glu Ser Gln Ile Pro Leu Asn Leu Glu Asn Gln Ile Glu Asn Val
225          230          235          240
Asp Ile Ser Met Asn Ser Asp Asp Glu Glu Glu Xaa Glu Arg Asp Ser
245          250          255
Asp Cys Ser His Asn Gly Ile Asn His Ser Arg Tyr Glu Asp Phe Asn
260          265          270
Asp Val Asp Asp Ile Leu Val
275

```

&lt;210&gt; 44003

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44003

```

Trp Met Ser Tyr Asn Pro Ser His Glu Trp Trp Arg Ile Pro Arg Ile
1           5           10           15
Trp Thr Cys Arg Thr Met Thr Gln Ser Gly Glu Arg Gly Ser Glu Asp
20           25           30
Tyr Asp Leu Gly Thr Asp Arg Asp Gln Arg Ser His Gln Arg Arg Thr
35           40           45
Ile Asn Trp Leu Cys Cys Ser Ser Glu Gln Gly Gln Lys Gln Asn His
50           55           60
Ala Val His Thr Glu Leu Thr Ile Ile Tyr Phe Gln Ile Thr Thr Thr
65           70           75           80
Met Pro Ser Val Ser Gln Leu Val Ser Ala Ala Leu Ala Ala Gly Ala
85           90           95
Phe Thr Thr Val Asn Ala Ala Met Gly Pro Ala Phe Ser Thr Gly Pro
100          105          110

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## 19879

Val Ala Ser Asn Ser Phe Ile Arg Glu Ala Thr Ser Thr Leu Ile Leu  
 115 120 125  
 Pro

<210> 44004  
 <211> 257  
 <212> PRT  
 <213> A.fumigatus

<400> 44004  
 Val Asn Glu Ile Phe Pro Glu Val Thr Phe Phe Leu Leu Ala Gln Glu  
 1 5 10 15  
 Leu Pro Arg Gly Arg Thr Ile Asn Asn Ser Ile Thr Asp Phe Glu Ser  
 20 25 30  
 Ser Ala Asn Gly Ser Thr Ile Pro Leu Thr Arg Pro Ile Leu Ser Val  
 35 40 45  
 Tyr Val Phe Glu Ser Ser Val Cys Asp Val Thr Asn Ser Asn Ser Asn  
 50 55 60  
 Ser Asp His Thr Phe Thr Ala Glu Gly Gly His Ser Ser Asp Glu Met  
 65 70 75 80  
 Leu Ser Thr Thr Asp Ile Tyr Asn Ser Leu Thr Ser Lys Ser Val Ser  
 85 90 95  
 Thr Pro Thr Glu Thr Ser Trp Leu Asn Ser Val Ala Gly Thr Ser Asn  
 100 105 110  
 Met Val Asp Met Arg Thr Ser Thr Gly Thr Ile Ile Ser Phe Ser Glu  
 115 120 125  
 Val Ala Thr Thr Glu Met Ile Ser Ser Pro Ser Asp Thr Gly Asn Pro  
 130 135 140  
 Lys Lys Ser Ser Ala Ile Asp Tyr Gly Thr Asn Ser Asp Ile Thr Thr  
 145 150 155 160  
 Leu Thr Gly Arg Tyr Thr Ser Leu Arg Asp Glu Thr Val Ser Thr Leu  
 165 170 175  
 Gln Glu Asp Ala Gly Ile Glu Ser Thr Thr Val Gly Gly Ile Thr Lys  
 180 185 190  
 Thr Val His Thr Thr Val Tyr Val Thr Thr Ser Pro Asp Asn Ser Ile  
 195 200 205  
 Thr Thr Glu Thr Ala Val Val Val Val Val Thr Asn Asp Ser Thr Ala  
 210 215 220  
 Thr Thr Tyr Thr Glu Ile Ile Gln Thr Thr Val Val Glu Gly Lys Thr  
 225 230 235 240  
 Leu Thr Thr Ala Ile Pro Ile Leu His His Gly Arg Arg Arg Ser Ala  
 245 250 255  
 Leu

<210> 44005  
 <211> 75  
 <212> PRT  
 <213> A.fumigatus

<400> 44005  
 Ile Ser Leu Gly Asp Ile Val Ile Pro Cys Gly Leu Ser Leu Asp Ser  
 1 5 10 15  
 Leu Ala Met Thr Val Ile Val Pro Val Gly Ile Ile Thr Leu Cys Val  
 20 25 30

## 19880

Leu Ala Tyr Ala Ile Glu Tyr Met Ser His Asp Pro Asn Arg Asn Arg  
           35                  40                  45  
 Phe Tyr Ile Ile Leu Ser Ile Phe Ala Val Phe Met Thr Ile Leu Val  
       50                  55                  60  
 Val Ser Asp Asn Tyr Leu Met Met Phe Ile Gly  
 65                  70                  75

<210> 44006  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 44006  
 Ser Thr Arg Ile Thr Ala Met Lys Ser Ala Leu Ser Ala Ile Leu Leu  
 1                  5                  10                  15  
 Asn Arg Met Gly Asp Thr Phe Phe Val Ile Ala Leu Gly Leu Met Ile  
           20                  25                  30  
 Asn Tyr Tyr His Ala Val Asp Tyr Asp Thr Ile Ala Leu Val Thr Pro  
       35                  40                  45  
 Tyr Met Asn Thr Phe Leu Leu Tyr Thr Leu Gly Leu Leu Leu Leu  
       50                  55                  60  
 Ala Ala Thr Ala Lys Ser Ala Gln Leu Gly Leu His Ala  
 65                  70                  75

<210> 44007  
 <211> 87  
 <212> PRT  
 <213> A.fumigatus

<400> 44007  
 Leu Met Ile Ser Cys Tyr Leu Asn Leu Tyr Ser Leu Ser Met Met Ser  
 1                  5                  10                  15  
 Ser Tyr Asp Leu Ile Thr Leu Ile Asn Cys Leu Leu Lys Tyr Tyr Leu  
           20                  25                  30  
 Leu Ala Val Thr Leu Glu Leu Ile His Ile Arg Gly Tyr Tyr Asp Asp  
       35                  40                  45  
 Ile Tyr Gly Asn Ile Phe Ser Leu Ile Ile Ile Ile Leu Ala Gly Gly  
       50                  55                  60  
 Glu Ser Ala Ile Gly Leu Ser Ile Leu Val Ala Tyr Tyr Arg Leu Arg  
 65                  70                  75                  80  
 Gly Thr Ile Gly His Ser Ile  
                   85

<210> 44008  
 <211> 235  
 <212> PRT  
 <213> A.fumigatus

<400> 44008  
 Leu Leu Arg Ile Leu Pro Ala Pro Val Val Lys Asp Glu Ala Leu Thr  
 1                  5                  10                  15  
 Gln Ala Phe Arg Lys Ser Ile Gly Ile Lys Ile Lys Glu Glu Thr Glu  
           20                  25                  30  
 Ile Ile Glu Gly Glu Val Val Glu Ile Gln Ile Asp Arg Thr Ile Thr  
       35                  40                  45  
 Gly Gly His Lys Gln Gly Lys Leu Thr Ile Lys Thr Thr Asp Met Glu



## 19881

50                      55                      60  
 Thr Ile Tyr Glu Leu Gly Asn Lys Met Ile Glu Gly Leu Thr Lys Glu  
 65                      70                      75                      80  
 Lys Val Leu Ala Gly Asp Val Ile Ser Ile Asp Lys Ala Ser Gly Ile  
                     85                      90                      95  
 Ile Thr Lys Leu Gly Arg Ser Phe Thr Thr Ala Arg Asp His Asp Ala  
                     100                      105                      110  
 Met Gly Pro Glu Thr Lys Phe Val Gln Cys Pro Glu Gly Glu Leu Gln  
                     115                      120                      125  
 Lys Arg Lys Glu Val Val His Thr Ile Ser Leu His Glu Ile Asp Val  
                     130                      135                      140  
 Ile Asn Ser Arg Gln Gln Gly Phe Leu Ala Leu Phe Ser Gly Asp Thr  
 145                      150                      155                      160  
 Gly Glu Ile Arg Pro Glu Val Arg Asp Gln Ile Asn Thr Lys Val Ala  
                     165                      170                      175  
 Glu Trp Asn Glu Gln Gly Lys Ala His Ile Val Pro Gly Val Leu Ser  
                     180                      185                      190  
 Ile Asp Glu Val His Met Ser Asp Ile Glu Cys Leu Ser Phe Ile Asn  
                     195                      200                      205  
 Arg Ala Leu Glu Asp Glu Phe Ser Pro Ile Val Ile Met Ala Thr Asn  
                     210                      215                      220  
 Arg Gly Val Ser Arg Leu Arg Gly Thr Asp Tyr  
 225                      230                      235

&lt;210&gt; 44009

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44009

His Val Asn Phe Ile Asp Arg Gln His Pro Arg Asn Asn Met Cys Leu  
 1                      5                      10                      15  
 Thr Leu Phe Val Pro Phe Gly Asn Phe Ser Ile Asp Leu Val Thr Asn  
                     20                      25                      30  
 Leu Trp Ser Asn Phe Pro Ser Ile Pro Arg Lys Gln Ser Gln Glu Ser  
                     35                      40                      45  
 Leu Leu Ser Arg Ile Tyr Asn Ile Asn Phe Met Gln Arg Asp Ser Val  
                     50                      55                      60  
 Asp Asn Phe Phe Ser Leu Leu  
 65                      70

&lt;210&gt; 44010

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44010

Thr Ser Ser Ile Asp Asn Thr Pro Gly Thr Ile Cys Ala Leu Pro Cys  
 1                      5                      10                      15  
 Ser Phe His Ser Ala Thr Leu Val Leu Ile Trp Ser Arg Thr Ser Gly  
                     20                      25                      30  
 Leu Ile Ser Pro Val Ser Pro Glu Asn Lys Ala Lys Asn Pro Cys Cys  
                     35                      40                      45  
 Leu Glu Phe Ile Thr Ser Ile Ser Cys Lys Glu Ile Val Trp Thr Thr  
                     50                      55                      60  
 Ser Phe Leu Phe Cys Asn Ser Pro Ser Gly His Trp Thr Asn Leu Val

## 19882

65                      70  
 Ser Gly Pro Met Ala Ser  
                       85

75

80

&lt;210&gt; 44011

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (4),(13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44011

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Phe | Xaa | Gly | Phe | Ile | Gln | Val | Glu | His | Leu | Xaa | Gly | Asn | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Asn | Ser | Asp | Val | Gly | Leu | Phe | Glu | Ile | Thr | Leu | Ile | Gly | Thr | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Thr | Asp | Gln | Ser | Gln | Leu | Ser | Asn | Asn | Tyr | Thr | Met | Met | Val | Ser |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asn | Asp | Thr | Gly | Leu | Tyr | Leu | Thr | Ser | Gln | Ala | Leu | Leu | Tyr | Ser | Glu |
|     |     |     | 50  |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ser | Lys | Ser | Gly | Gln | Thr | Asn | Gly | Asn | Gly | Gly | Leu | Val | Val | Lys |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Pro | Gly | Asp | Lys | Ile | Lys | Ile | Gln | Phe | Glu | Lys | Asn | Leu | Phe | Lys | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     | 95  |     |     |
| Tyr | Ser | Ser | Ser | Asp | Arg | Pro | Ile | Ile | Ala | Tyr | Tyr | Gly | Arg | Ser | Ala |
|     |     |     |     | 100 |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Arg | Ser | Ser | Leu | Pro | Asn | Trp | Ile | Tyr | Phe | Asp | Gly | Asp | Thr | Leu |
|     |     |     |     | 115 |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Thr | Phe | Ser | Gly | Thr | Val | Pro | Tyr | Val | Thr | Ser | Glu | Asn | Ala | Pro | Ser |
|     |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile | Asp | Tyr | Ser | Phe | Ser | Phe | Ile | Ala | Ser | Asp | Tyr | Tyr | Gly | Phe | Ala |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Gly | Ala | Glu | Gly | Lys | Phe | Lys | Ile | Val | Val | Gly | Gly | His | Gln | Leu | Ser |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Thr | Ser | Met | Asn | Glu | Thr | Asn | Ile | Val | Asn | Gly | Thr | Ile | Gly | Ser | Lys |
|     |     |     |     | 180 |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Ile | Asp | Glu | Ser | Ile | Pro | Ile | Leu | Ser | Asp | Val | Phe | Leu | Asp | Gly | Gln |
|     |     |     |     | 195 |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Pro | Ile | Ser | Lys | Glu | Asn | Ile | Ser | Asp | Ile | Tyr | Asp | Gln | Asp | Leu | Pro |
|     |     |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Asn | Tyr | Ala | Thr | Phe | Asp | Lys | Asn | Asn | Phe | Thr | Ile | Thr | Gly | Thr | Phe |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Pro | Asn | Thr | Ser | Thr | Thr | Asp | Asn | Phe | Thr | Ile | Val | Val | Lys | Asp | Ile |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Tyr | Gly | Asn | Ser | Val | Glu | Leu | Pro | Tyr | Ser | Phe | Asp | Val | Val | Asn | Ser |
|     |     |     |     | 260 |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ile | Phe | Thr | Ile | Asp | Ser | Leu | Lys | Asp | Val | Asn | Ala | Thr | Arg | Gly | Pro |
|     |     |     | 275 |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Tyr | Phe | Gln | Tyr | Phe | Ser | Pro | Arg | Pro | Glu | Ile | Pro | Leu |     |     |     |
|     |     |     | 290 |     |     | 295 |     |     |     |     | 300 |     |     |     |     |

&lt;210&gt; 44012

&lt;211&gt; 303

## 19883

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (263), (284), (290)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44012

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Tyr | Leu | Arg | Ile | Leu | Gly | Gly | Phe | Val | Glu | Lys | Asn | Gly | Phe | Leu | 1   | 5   | 10  | 15  |
| Cys | Gly | Gln | Ser | Tyr | Gly | Tyr | Leu | Val | Glu | Asp | Asp | Leu | Ile | Trp | Thr | 20  | 25  | 30  |     |
| Ala | Asp | Lys | Leu | Thr | Ala | Ser | Asp | Arg | Lys | Ile | Thr | Thr | Ala | Asn | Leu | 35  | 40  | 45  |     |
| Gln | Arg | Lys | Ser | Leu | Ile | Cys | Tyr | Leu | Met | Ala | Ile | Asn | Lys | Ser | Leu | 50  | 55  | 60  |     |
| Asp | Glu | Ser | Ile | Lys | Asp | Val | Ile | Lys | Pro | Val | Val | Gly | Asn | Leu | Met | 65  | 70  | 75  | 80  |
| Ser | Leu | Phe | Ala | Lys | Glu | Met | Phe | Ser | Ala | Val | Cys | Glu | Pro | Met | Ser | 85  | 90  | 95  |     |
| Met | His | Ala | Phe | Lys | Val | Gln | Ser | His | Pro | Arg | Phe | Ile | Asn | Arg | Val | 100 | 105 | 110 |     |
| Asn | Gly | Ala | Leu | Phe | Glu | Pro | Val | Ser | Gln | Phe | Pro | Ala | Val | Asp | Lys | 115 | 120 | 125 |     |
| Thr | Val | Cys | Leu | Lys | Ile | Ile | Gln | Gln | Ser | Leu | Gln | Leu | Ser | Ile | Lys | 130 | 135 | 140 |     |
| Ser | Ser | Cys | Arg | Glu | Trp | Ser | Asp | Tyr | Tyr | Tyr | Leu | Ala | Lys | Val | Gln | 145 | 150 | 155 | 160 |
| Arg | Lys | Leu | Asp | Lys | Pro | Ala | Gly | Leu | Val | Met | Glu | Thr | Met | Ala | Ser | 165 | 170 | 175 |     |
| Ala | Cys | Arg | Ser | Ala | Phe | Lys | Asn | Lys | His | Ala | Asp | Asn | Ile | Ile | Glu | 180 | 185 | 190 |     |
| Pro | His | Tyr | Asn | Leu | Val | Ser | Phe | Ala | Leu | Lys | Tyr | Val | Lys | Ser | Asn | 195 | 200 | 205 |     |
| Arg | Leu | Asp | Ser | Lys | Asp | Ala | Leu | Lys | Tyr | Leu | Ile | Glu | Asp | Pro | Leu | 210 | 215 | 220 |     |
| Ile | Lys | Leu | Glu | Val | Arg | Glu | Glu | Thr | Asp | Phe | Ile | Lys | Leu | Ile | Ile | 225 | 230 | 235 | 240 |
| Lys | Ala | Leu | Asn | Lys | Ile | Asp | Leu | Ser | Asp | Lys | Lys | Asn | Trp | Gln | His | 245 | 250 | 255 |     |
| Lys | Ala | Lys | Tyr | Lys | Leu | Xaa | Arg | Leu | Met | Gln | Glu | Glu | Tyr | His | Asp | 260 | 265 | 270 |     |
| Val | Lys | Arg | Ala | Ile | Asp | Ser | Met | Leu | Ser | Leu | Xaa | Ser | Leu | Lys | Thr | 275 | 280 | 285 |     |
| Pro | Xaa | Lys | Ala | Leu | Val | Leu | Ile | Trp | Lys | Pro | Glu | Pro | Glu | Arg | 290 | 295 | 300 |     |     |

&lt;210&gt; 44013

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44013

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |   |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|----|----|
| Ser | Asp | His | Ser | Arg | Gln | Leu | Asp | Leu | Ile | Asp | Asn | Cys | Asn | Asp | Cys | 1 | 5 | 10 | 15 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|----|----|

## 19884

Cys Ile Ile Phe Lys Gln Thr Val Leu Ser Thr Ala Gly Asn Cys Glu  
                   20                  25                  30  
 Thr Gly Ser Asn Lys Ala Pro Leu Thr Arg Leu Ile Asn Leu Gly Cys  
                   35                  40                  45  
 Asp Cys Thr Leu Lys Ala Cys Ile Leu Ile Gly Ser Gln Thr Ala Leu  
                   50                  55                  60  
 Asn Ile Ser Leu Ala Asn Lys Asp Ile Lys Leu Pro Thr Thr Gly Leu  
 65                  70                  75                  80  
 Ile Thr Ser Leu Met Asp Ser Ser Ser Asp Leu Leu Ile Ala Ile Lys  
                   85                  90                  95

<210> 44014  
 <211> 162  
 <212> PRT  
 <213> A.fumigatus

<400> 44014  
 Cys Leu Leu Ile Ser Leu Ser Ser Glu Ser Val Cys Asp Ile Ile His  
 1                  5                  10                  15  
 Cys Lys Thr Leu Lys Leu Phe Asp Leu Arg Gln Phe Phe Ile Asn Phe  
                   20                  25                  30  
 Gln Gln Trp Gln Arg Lys Ile Glu Ser Lys Ala Thr Gly Lys Lys Cys  
                   35                  40                  45  
 Glu Glu Lys Lys Asn Asp Gly Lys Tyr Ser Leu Leu His Thr Asn Phe  
                   50                  55                  60  
 Tyr Ile Thr Thr Thr Thr Ile Met Phe Gly Leu Gly Gly Thr Thr Pro  
 65                  70                  75                  80  
 Gln Ile Ser Ser Gln Gln Lys Leu Gln Ala Ala Glu Ala Glu Leu Asp  
                   85                  90                  95  
 Met Val Thr Gly Met Phe Asn Ala Leu Val Ser Gln Cys His Thr Lys  
                   100                  105                  110  
 Cys Ile Asn Lys Ser Tyr Asn Glu Ala Asp Ile Ser Lys Gln Glu Ser  
                   115                  120                  125  
 Leu Cys Leu Asp Arg Cys Val Ala Lys Tyr Phe Glu Thr Asn Val Gln  
                   130                  135                  140  
 Val Gly Glu Asn Met Gln Lys Leu Gly Gln Ser Gly Gln Phe Met Gly  
 145                  150                  155                  160  
 Arg Arg

<210> 44015  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

<400> 44015  
 Arg Ile Phe Gly Tyr Asp Lys Pro Phe Asp Leu His Asp Trp Leu Ile  
 1                  5                  10                  15  
 Asn Arg Cys Gly Val Glu Val Glu Tyr Val Met Asp Phe Tyr Ile Gly  
                   20                  25                  30  
 Gln Asn Ile Gln Val Tyr Leu Asp Val Arg Pro Thr Leu Asn Thr Leu  
                   35                  40                  45  
 Gly Gly Ile Lys Met Arg Phe Gly Arg Pro Phe Gly Phe  
                   50                  55                  60

<210> 44016

## 19885

<211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 44016

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Gly | Leu | Phe | Gly | His | Leu | Tyr | Leu | Lys | Ser | Cys | Asn | Thr | Ser | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Ser | Phe | Val | Asp | Pro | Pro | Leu | Asn | Asn | Ser | Pro | Leu | Phe | Asn | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Leu | Thr | Ala | Pro | Thr | Arg | Ile | Tyr | Lys | Pro | Asn | Pro | Pro | Asn | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Trp | Ser | Tyr | Phe | Ser | Ile | Ile | Ser | Gly | Lys | Ile | Ser | Lys | Phe | Lys | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 44017  
 <211> 207  
 <212> PRT  
 <213> A.fumigatus

<400> 44017

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Cys | Pro | Asn | Arg | Pro | Ile | Tyr | Leu | Val | Gly | Phe | Tyr | Phe | Gly | Gly |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Leu | Thr | Ala | Asn | Phe | Leu | Gly | Glu | Glu | Gly | Glu | Lys | Glu | Asn | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Ser | Leu | Val | Lys | Ala | Ala | Tyr | Thr | Phe | Gly | Cys | Pro | Trp | Asp | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Val | Asp | Gly | Ala | Tyr | Gln | Leu | Gln | Asn | Ser | Trp | Thr | Gly | Lys | Tyr | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Ser | Pro | Ala | Leu | Ala | Lys | Phe | Leu | Ala | Lys | Ile | Val | Thr | Asn | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Tyr | Lys | Glu | Leu | Glu | Thr | Tyr | Ala | His | Asp | Ile | Val | Asn | Lys | Glu | Thr |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Lys | Val | Ile | Lys | Asn | Cys | Lys | Thr | Leu | Trp | Glu | Phe | Asp | Asp | Asn |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Thr | Cys | Lys | Thr | Thr | Pro | Tyr | Lys | Asp | Ala | Phe | Glu | Tyr | Tyr | Gln |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Leu | Ser | Pro | Val | Lys | Lys | Leu | Ser | Gln | Ile | Asn | Thr | Pro | Leu | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Leu | Asn | Ser | Thr | Asp | Asp | Pro | Ala | Val | Gly | Val | Lys | Leu | Pro | Ile |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Leu | Gln | Met | Lys | Ala | Asn | Pro | Tyr | Phe | Cys | Leu | Val | Glu | Thr | Asp | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Gly | His | Leu | Gly | Tyr | Val | Gln | Leu | Asn | Gly | Glu | Phe | Trp | Cys | Val |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| Glu | Leu | Val | Glu | Gln | Phe | Phe | Gln | Lys | Phe | Glu | Glu | Leu | Val | Lys |     |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

<210> 44018  
 <211> 266  
 <212> PRT  
 <213> A.fumigatus

<400> 44018

Lys Thr Gly Val Phe Gly Arg Gly Thr Val Ser Arg Ile Ser Ile Arg

## 19886

```

1           5           10           15
Ser Ile His Leu Arg Asn Thr Thr Asn Phe Val Val Pro Glu Asn Tyr
      20           25           30
Lys Pro Asn Arg Ser Leu Leu Lys Gln Leu Pro Trp Lys Ala Gly Leu
      35           40           45
Asp Ile Trp Trp Lys Ser Leu Ser Pro Asn Arg Leu Ser Asp Leu Gln
      50           55           60
Lys Asp Leu Val Glu Phe Met Leu Pro Ser His Leu Gln Glu Asn Gln
      65           70           75           80
Arg Ile Ile Lys Glu Phe Lys Lys Thr Thr Ile Asp Asp Lys Gly Asn
      85           90           95
Tyr Ile Asn Glu Val Gly Phe Lys Ile Ile Asn Asn Lys Asp Lys Pro
      100          105          110
Thr Lys His Leu Val Phe Ile His Gly Tyr Gly Ala Ser Leu Gly Cys
      115          120          125
Phe Ala Arg Asn Phe Gln Ile Asn Lys Phe Lys Asp Thr Asp Tyr
      130          135          140
Asn Tyr His Val His Phe Leu Asp Asn Leu Thr Phe Gly Leu Ser Ser
      145          150          155          160
Asn Pro Arg Val Asn Asn Asp Thr Ile Asn Tyr Trp Arg Ile Pro Ala
      165          170          175
Thr Ala Ile Val Lys Leu Phe Asp Lys Thr Pro Thr Asp Ser Lys Lys
      180          185          190
Leu Tyr Arg Lys Tyr Tyr Lys Leu Ile Glu Gly Tyr Gln Leu Asp Pro
      195          200          205
Glu Asn Phe Glu Lys Tyr Arg Ser Tyr Phe Thr Pro Ile Leu Lys Asp
      210          215          220
Leu Glu Asn Phe Tyr Cys Ser Ala Ile Glu Lys Trp Arg Leu Asn Asn
      225          230          235          240
Asp Ile Asp Ser Met Asp Tyr Leu Val Gly His Ser Phe Gly Gly Tyr
      245          250          255
Trp Cys Gly Asn Tyr Ala Leu Lys Tyr Pro
      260          265

```

&lt;210&gt; 44019

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44019

```

Asp Thr Asp Ala Asp Val Asp Met Asp Lys Pro Ser Lys Ser Glu Leu
1           5           10           15
Ser Arg Ser Ala Lys Asp Arg Gln Ser Glu Val Ile Ala Ser His Asn
      20           25           30
Met Val Thr Gln Phe Asn Phe Asp Asp Glu Leu Gly Glu Trp Cys Glu
      35           40           45
Phe Lys Leu Glu Leu Asn Gly Asn Glu Thr Gln Lys Leu Leu Met Val
      50           55           60
Asn Ile Val Glu Asp Leu Ser Arg Lys Val Val Arg Glu Ile Pro
      65           70           75           80
His Ile Gly Arg Cys Ile Arg Pro Glu Pro Asp Ala Lys Thr Gly Lys
      85           90           95
Arg Ile Leu Thr Thr Glu Gly Val Asn Phe Arg Ala Met Trp Asp Gln
      100          105          110
Asp Asp Phe Ile Asn Val Asn Gly Ile Thr Ser Asn Asp Val Tyr Ala
      115          120          125

```

## 19887

Val Leu Lys Thr Tyr Gly Val Glu Ala Ala Lys Asn Thr Ile Val Asn  
 130 135 140  
 Glu Ile Tyr Arg Val Phe Asp Thr Tyr Gly Ile Ser Val Ser Ser Arg  
 145 150 155 160  
 Pro Leu Asp Leu Ile Ala Asp Met Met Thr Arg Glu Gly Thr Tyr Leu  
 165 170 175  
 Ala Phe Asn Arg Gln Arg Ile Asp Ser Ser Thr Ser Ala Phe Met Lys  
 180 185 190  
 Met Ser Tyr Glu Thr Thr Cys Gln Phe Leu Thr Lys Ala Val Leu Asp  
 195 200 205  
 Gly Asp Arg Glu Glu Met Glu Ser Pro Ser Ala Lys Ile Val Met Gly  
 210 215 220  
 Lys Leu Ser Asn Val Gly Thr Gly Ser Phe Asp Val Phe Ala Pro Met  
 225 230 235 240  
 Pro Arg Phe

&lt;210&gt; 44020

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44020

Leu Pro Asp Gln Tyr Leu Tyr Gln Thr Ser Pro Asn Thr Met Leu Ser  
 1 5 10 15  
 Thr Pro Pro Val Thr Gln Asn Leu Leu Ser Ser His Pro Gln Asn Met  
 20 25 30  
 Ser Asn Arg Gln Arg Gln Asn Leu Leu Gly Arg Ser Met His Ser Thr  
 35 40 45  
 Thr Glu Ile Met Ala Arg Ser Gln Gly Thr Trp Phe Ser His Pro Gln  
 50 55 60  
 Ser Ser Trp Arg His Pro Val Pro Thr Gln Leu Ser Ile  
 65 70 75

&lt;210&gt; 44021

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44021

Ile Met Phe Tyr Tyr Ala Lys Thr Pro Gln Asp Pro Met Phe Lys Leu  
 1 5 10 15  
 Glu Asp Pro Arg Glu Tyr Thr Glu Glu Asn Arg Leu Lys Val Arg Phe  
 20 25 30  
 Asp Pro Glu Lys Tyr Lys Glu Gly His Pro His Asp Glu Leu Ser Thr  
 35 40 45  
 Trp Asp Arg Ile Arg Leu Ser Asn Gly Tyr Asp Ile Thr Glu Glu Lys  
 50 55 60  
 Ser Ala Trp Asp Glu Ile Arg Ser Lys  
 65 70

&lt;210&gt; 44022

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19888

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (26), (27)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44022

```

Leu Lys Lys Ser Arg Pro Gly Thr Arg Leu Gly Val Asn Arg Phe Ile
1          5          10          15
Lys Cys Glu Lys Lys Lys Phe Ser Thr Xaa Xaa Leu His Val Asp Thr
          20          25          30
His His Gln Ala Val Met Asp Ala Phe Ser Asp Ser Gly Glu Leu Tyr
          35          40          45
Thr Ile Arg Asn Gln Phe Tyr Thr Asn Gln His Asn Lys Val Lys Ala
          50          55          60
Tyr Ser Leu Asp Glu Phe Ser Pro Glu Asn Gln Leu Lys Val Leu Glu
65          70          75          80
Phe Gln Ile Arg Ser Thr Ile Ala Leu Glu Gln Asp Ala Ser Lys Met
          85          90          95
Ile Glu Asp Gly Lys Thr Arg Phe Pro Glu Asn Glu Pro Leu Phe Gln
          100          105          110
Leu Leu Ser Ala Trp Asn Asp Leu Lys Asp Phe Gly Val Asp Asp Ser
          115          120          125
Thr Tyr Phe Glu Asp Val Lys Lys Ala Ser Phe Glu Leu Gln Ala Val
          130          135          140
Leu Thr Ala Leu Tyr Leu Val Lys Phe Asp Lys Asp Ile Asp Gln Ala
145          150          155          160
Ile Thr Phe Leu Ser Asp Tyr Ile Asp Asn Val Asn Ser Leu Ala Lys
          165          170          175
Tyr Asn Glu Leu Glu Pro Phe Leu Val Leu Val Gln Phe His Leu Ile
          180          185          190
Lys Gly Phe His Asn Gly Val Glu Asp Pro Gln Leu
          195          200

```

&lt;210&gt; 44023

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (36)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44023

```

Lys His Arg Ser Thr Ala Asp Ser Phe Leu Ser Gln Gln Val Asp Glu
1          5          10          15
Lys Pro Trp Val Asp Ala Leu Asp Asn Ser Ser Val Gln Glu Tyr Gln
          20          25          30
Gly Phe Asp Xaa Thr Ala Ser His Asn Ile Gln Asp Leu Ala Arg Lys
          35          40          45
Leu Thr His Gly Ser Thr Asn Gly Asp His His Ser Ala Asn Asp Leu
          50          55          60
Ala Arg Tyr Leu Ser His Met Ser Asp Ile Pro Gly Val Ser Pro Phe
65          70          75          80
Asn Gly Asn Ile Ser His Glu Gln Leu Asp Pro Asp Ser Glu Asn Phe
          85          90          95

```



## 19889

```

Asn Ala Lys Tyr Trp Val Lys Asn Leu Lys Lys Leu Phe Glu Ser Asp
      100                      105                      110
Ser Asp Tyr Tyr Lys Pro Ser Lys Leu Gly Val Ala Tyr Arg Asn Leu
      115                      120                      125
Arg Ala Tyr Gly Ile Ala Asn Asp Ser Asp Tyr Gln Pro Thr Val Thr
      130                      135                      140
Asn Ala Leu Trp Lys Phe Thr Thr Glu Ala Ile Asn Lys Leu Lys Lys
      145                      150                      155                      160
Pro Asp Asp Ser Lys Tyr Phe Asp Ile Leu Lys Ser Met Asp Ala Ile
      165                      170                      175
Met Arg Pro Gly Glu Leu Thr Val Val Leu Gly Arg Pro Gly Ala Gly
      180                      185                      190
Cys Ser Thr Leu Leu Lys Thr Ile Ala Val Asn Thr Tyr Gly Phe His
      195                      200                      205
Ile Gly Lys Glu Ser Gln Ile Thr Tyr Asp Gly Leu Ser Pro His Asp
      210                      215                      220
Ile Glu Arg His Tyr Arg Gly Asp Val Ile Tyr Ser Ala Glu Thr Asp
      225                      230                      235                      240
Val His Phe Pro His Leu Ser Val Gly Asp Thr Leu Glu Phe Ala Ala
      245                      250                      255
Arg Leu Arg Thr Pro Ser Ser Thr Thr Gly Ala Gly Arg Ser Ala Thr
      260                      265                      270

```

<210> 44024  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44024
Pro Ser His Ile Tyr Thr Arg Asn Met Lys Ile Asn Thr Pro Pro Pro
1      5      10      15
Asn Ser Phe Ile Tyr Phe Tyr Phe Pro Lys Asn Lys Lys Glu Tyr Lys
20     25     30
Tyr Pro Ile Ile Ile Asn Asn Phe Asn Asn Leu Lys Leu Ile Ile Ser
35     40     45
Ser Leu Leu Gln Ser Gln Val Leu Arg Thr Leu His Val
50     55     60

```

<210> 44025  
 <211> 76  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44025
Gly Lys Leu Phe Ser Ser Ile Tyr Thr Ser Thr Ser Trp Phe Arg Ile
1      5      10      15
Tyr Tyr Phe Tyr Leu Tyr Thr Phe Phe Ile Ser Phe Tyr Leu Ser Phe
20     25     30
Leu Pro Ser Phe Leu Ala Ser Ser Phe Val Thr Glu Val Asn Leu Gly
35     40     45
Asp Pro Gln Asp Asn Gln Lys Leu Asn Asn Arg Ile Ile Gln Asp Lys
50     55     60
Leu Leu Val Phe Ser Arg Pro Trp Lys Ile Arg Thr
65     70     75

```

<210> 44026

## 19890

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44026

```

Tyr Gly Cys Arg Gly Val Leu Lys Ile Gln Glu Gln Gln Gln Gln Gln
1          5          10          15
Gln Gln Leu Gln Gln Leu Leu His Tyr Gln Gln Gln Asp Phe Gly Tyr
20          25          30
Asn Gly Ser Gln Gln Ser Tyr Asn Asn Asn Asn Asn Asn Ser Asn
35          40          45
Ile Asn Thr Gln Gln Gln His Asn Asn Ser Ser Lys Pro Pro Gln Ile
50          55          60
Glu Glu Leu Val Lys Gln Tyr Lys Leu Pro Met Lys Arg Ala Ala Gln
65          70          75          80
Gly Glu Thr Ser Asp Ala Ser Asp Lys Pro Thr Thr Asp Thr Ser Pro
85          90          95
Thr Ser Ser Ile Lys Ser Phe Pro Glu Ile Ser Met Val Thr Asp Asn
100         105         110
Leu Thr Asn Lys Gln Asp Phe Ile Asp Asn Phe Glu Pro Thr Gln Leu
115         120         125
Phe Pro Asn Phe Ser Ile Pro Pro Thr Arg Ala Gln Ser Pro Thr Pro
130         135         140
Asn Tyr Glu Asp His Asn Asp Asn Gly Ile Gly Ser Asn Ile Tyr Gly
145         150         155         160
Phe Met Asn Gln Glu Met Thr Met Arg Asp Ile Val Ala Pro Ser Gln
165         170         175
Gln Glu Gln His Gln Gln Phe His Asn Asp Val Ile Gly Asn Gly Gln
180         185         190
His Gln His Ile Asn Gly Asp Asn Asn Asn Arg Asp Pro His Thr Pro
195         200         205
Gly Phe Gln Thr Asn Phe Ile Asp Ser Ala Phe Asn Tyr Leu Asn Leu
210         215         220
Gln Ser Gly Ile Asp Met Asn Glu Asp Ile His Ser Leu Phe His Met
225         230         235         240
Met Asn

```

&lt;210&gt; 44027

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (29)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44027

```

Gln Lys Ser Arg Thr Asp Thr Tyr Val Lys Arg Phe Val Thr Phe Leu
1          5          10          15
Cys Leu Leu Ser Thr Ile Ser Leu Gln Gly Thr Thr Xaa Thr Thr Thr
20          25          30
Thr Thr Asn Thr Ile Asn Val Asn Lys Asp Ile Leu Asn Gly Glu Phe
35          40          45
Val Ile Gln Phe Leu Glu Ser Val Gln Ser Gly Leu Phe Gln Gln Ile

```

# 19891

|                         |                         |                     |     |    |
|-------------------------|-------------------------|---------------------|-----|----|
| 50                      |                         | 55                  |     | 60 |
| Leu Thr Ser Phe Ile Leu | Pro Thr Ser Ser Ile Leu | Thr Asn Leu Gln     |     |    |
| 65                      | 70                      | 75                  | 80  |    |
| Asp Lys Lys Leu Val Asn | Ile Gly Leu Ser Gln     | Ile Leu Val Thr Ile |     |    |
|                         | 85                      | 90                  | 95  |    |
| Ser Thr Thr Ser Glu Gln | Tyr Ala His Leu Thr     | Pro Leu Ile Leu Glu |     |    |
|                         | 100                     | 105                 | 110 |    |
| Thr Leu Ile Ser Asn Leu | Asn Ser Tyr Glu Gly     | Ile Ser Lys Ser Ser |     |    |
|                         | 115                     | 120                 | 125 |    |
| Thr Asn Asn Asn Asn Asn | Gly Ile Ser Ser Ser     | Ser Ser Thr Ile Ala |     |    |
|                         | 130                     | 135                 | 140 |    |
| Thr Thr Ile Ser Gly Gly | Gln Gln Pro Leu Ile     | Ser Ser Pro Arg Arg |     |    |
| 145                     | 150                     | 155                 | 160 |    |
| Trp Lys Asp Pro His     |                         |                     |     |    |
|                         | 165                     |                     |     |    |

<210> 44028

<211> 64

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (16)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44028

|                         |                     |                     |
|-------------------------|---------------------|---------------------|
| Met Glu Asp Val Pro Arg | Ile Phe Ser Leu Asn | Leu Phe Lys Asn Xaa |
| 1                       | 5                   | 10                  |
| Ile Phe Asn Trp Lys Lys | Phe Leu Asn Asn Arg | Asp Thr Arg Lys Leu |
|                         | 20                  | 25                  |
| Leu Lys Phe Asp Phe Thr | Leu Tyr Ile His Phe | Trp Tyr Gly Ile Phe |
|                         | 35                  | 40                  |
| Trp Glu Tyr Leu Arg Asp | Asn Lys Ile Ile Asn | Cys Tyr Phe Gly Thr |
|                         | 50                  | 55                  |
|                         |                     | 60                  |

<210> 44029

<211> 82

<212> PRT

<213> A.fumigatus

<400> 44029

|                         |                     |                     |
|-------------------------|---------------------|---------------------|
| Thr Trp Phe Ser Thr Arg | Gly Glu Thr Ser Gly | Ser Ser Ser Lys Thr |
| 1                       | 5                   | 10                  |
| Pro Ala Leu Asp Ile Thr | Leu Ser Gln Val Asn | Asn Thr Arg Ile Lys |
|                         | 20                  | 25                  |
| Ala Val Val Lys Asn Ser | Gly Thr Glu Lys Ile | Thr Phe Val His Leu |
|                         | 35                  | 40                  |
| Asn Phe Phe Asn Asp Pro | Ser Pro Val Lys Lys | Val Ser Leu Tyr Arg |
|                         | 50                  | 55                  |
| Asn Gly Ile Leu Leu Pro | Phe Pro Ser Met Ser | Leu Leu Pro Arg Lys |
| 65                      | 70                  | 75                  |
| His Arg                 |                     | 80                  |

<210> 44030

19892

<211> 185  
 <212> PRT  
 <213> A.fumigatus

<400> 44030

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Ala | Thr | Glu | Val | Glu | Phe | Thr | Gly | Ile | Lys | Gln | Arg | Leu | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Asp | Gly | Leu | Ser | Asn | Asp | Ala | Leu | Thr | Thr | Leu | Ala | Pro | Gly | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Tyr | Glu | Asp | Glu | Phe | Asp | Ile | Ala | Ser | Thr | Ala | Asn | Leu | Thr | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Gly | Pro | Val | Thr | Val | Arg | Thr | Gln | Gly | Phe | Val | Pro | Ile | Ala | Met |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Asn | Lys | Ile | Ala | Gly | Tyr | Ile | Pro | Tyr | Ser | Ser | Asn | Glu | Leu | Glu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Leu | Glu | Val | Asp | Ala | Glu | Lys | Ala | Val | Ala | Val | Pro | Ala | Ser | Ile | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Pro | Leu | Asp | Arg | Arg | Thr | Lys | Ile | Thr | Ser | Ser | Cys | Thr | Gly | Asn | Arg |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Thr | Val | Leu | Asn | Thr | Ala | Leu | Arg | Asn | Ala | Ala | Ser | Ile | Ala | Ser |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Ala | Ala | Asp | Ala | Ala | Ser | Ser | Gly | Ser | Ser | Ala | Leu | Phe | Thr | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr | Phe | Lys | Ser | Thr | Ser | Gly | Asn | Ile | Arg | Ser | Ala | Val | Ala | Ala | Arg |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |
| Leu | Lys | Ala | Val | Pro | Ser | Glu | Ala | Ser | Met | Asn | Arg | Gly | Gly | Ser | Thr |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asn | Tyr | Asn | Gly | Ser | Asp | Pro | Tyr | Gly |     |     |     |     |     |     |     |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     |     |     |

<210> 44031  
 <211> 80  
 <212> PRT  
 <213> A.fumigatus

<400> 44031

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Trp | Ser | Leu | Leu | Ala | Lys | Met | Asp | Met | Arg | His | His | Cys | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Tyr | Leu | His | Phe | Ser | Pro | Ser | Phe | Ser | Ile | Thr | Thr | His | Ile | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Ile | Gln | Thr | Arg | Phe | Ala | Ser | Ile | Ile | Lys | Ile | Ile | Arg | Phe | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Phe | Phe | Lys | Thr | Arg | Ile | Lys | Glu | Pro | Thr | Phe | Thr | Asp | Gln | Thr | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Thr | Phe | Arg | Tyr | Phe | Arg | Gln | Cys | Phe | Ile | Lys | Ile | Val | Lys | Ile |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |

<210> 44032  
 <211> 262  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (11)  
 <223> Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44032

```

Val His Val Phe Leu Leu Trp Ile Pro Val Xaa Ser Ser Gln Lys Ile
1          5          10          15
Glu Phe His Asn Met Pro Asn Gly Ser Pro Lys His His Ile Leu Asp
          20          25          30
Glu Asp Val Leu Leu Gly Ile Arg Tyr Leu Arg Asp Gly Glu Leu Asp
          35          40          45
Tyr His Pro Thr Lys Pro Leu Pro His Gln Asn His Phe Lys Asp Phe
          50          55          60
Cys Ile Lys Tyr Asn Lys Asp Pro Lys Leu Gly Asp Leu Asn Gln Ile
65          70          75          80
Asp Lys Ile Pro Cys Glu Ile Leu His Gln Phe Thr Thr Lys Ser Cys
          85          90          95
Trp Thr His Val Leu Ile Leu Phe Trp Val Gln Phe Thr Phe Ala Phe
          100          105          110
Lys Leu Tyr Ala Thr Leu Asn Thr Phe Leu Phe Val Phe Ile Lys Lys
          115          120          125
Phe Arg Gly Ser Pro Leu Lys Tyr Leu Tyr Lys Thr Ile Arg Ser Ala
          130          135          140
Ser Phe Leu Gly Ala Phe Thr Gly Ile His Trp Ala Ala Phe Cys Phe
145          150          155          160
Ile Arg Asn Tyr His Pro Asn Trp Phe Gly Gln Lys Phe Trp Asp Ile
          165          170          175
Leu Ala Pro Lys Ala Gly Tyr Ala Leu Cys Gly Thr Ser Ile Leu Leu
          180          185          190
Glu Tyr Pro Ser Arg Arg Asn Glu Leu Ser Leu Phe Val Leu Pro Lys
          195          200          205
Ala Leu Gly Thr Phe Ile Asp Pro Thr Pro Thr Glu Ser Asn Ile Ala
          210          215          220
Thr Glu Val Ile Ala Phe Ser Leu Ser Phe Ala Val Leu Ile Ala Tyr
225          230          235          240
Ala Arg Leu Gln Pro Ser Lys Leu Arg Gly Leu Val Gly Lys Gly Leu
          245          250          255
Ser Tyr Met Val Lys His
          260

```

&lt;210&gt; 44033

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44033

```

Arg Ile Ile Val Tyr Ile Glu Ser Asn Lys Cys Val Ser Pro Phe Leu
1          5          10          15
Thr Leu Ser Arg Asn Tyr Pro Ser Cys Pro Thr Thr Asn Arg Tyr Arg
          20          25          30
Leu Leu Ala Leu Gln Thr Ser Ala Glu Ile His Phe Asp Gly Leu Gln
          35          40          45
Ser Ser Ser Leu His Cys Arg His Thr Phe Trp Ser Ser Glu Lys Ser
          50          55          60
Glu Leu Leu Asp Ala Ser Lys Tyr Arg Lys Asn Asp Ser Phe Val His
65          70          75          80
Thr Thr Asn Ser Pro Asp Phe Leu Leu Thr Gln Cys Pro Ile Leu Pro
          85          90          95
Thr Arg

```

<210> 44034  
 <211> 190  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (1), (2), (3), (4), (5), (6), (7), (8)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44034  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Glu Asp Glu Lys Gly Lys Gln Val  
 1 5 10 15  
 Lys Leu Gln Lys His Ala Ser Glu Val Tyr Gln Gly Glu Arg Thr Val  
 20 25 30  
 Lys Ser Ile Thr Lys Phe Leu Thr Ser Arg Leu Lys Asn Tyr Val Lys  
 35 40 45  
 Lys Phe His Asn Ile Arg Ser Asp Gly Ile Ala Glu Trp Leu Ala Glu  
 50 55 60  
 Asp Ile Pro Ser Val Leu Leu Ile Ser Asn Ala Asn Leu Val Ser Pro  
 65 70 75 80  
 Leu Leu Lys Ser Ile Ala Ile Asp Phe Leu Asp Arg Val Asn Val Gly  
 85 90 95  
 Met Ile Ser Lys Phe Asn Asp Glu Ser His Lys Phe Val Ile Gly Asp  
 100 105 110  
 Lys Glu Ile Glu Val Pro Ala Thr Ser Lys Ser Ser Leu Phe Tyr Phe  
 115 120 125  
 Asn Lys Glu Lys Gly Glu Leu Val Ala Tyr Thr Lys Ser Asp Lys Leu  
 130 135 140  
 Asn Asp Lys Ile Lys Ile Thr Glu Trp Ile Ile Glu Gln Thr Gln Gln  
 145 150 155 160  
 Gln Pro Ile Glu Gly Pro Leu Ser Lys Ile Asp Lys Lys Tyr Tyr Tyr  
 165 170 175  
 Lys Tyr Arg Thr Gly Lys Lys Lys Ile Glu His Asp Glu Leu  
 180 185 190

<210> 44035  
 <211> 105  
 <212> PRT  
 <213> A.fumigatus

<400> 44035  
 Arg Pro Val Thr Gly Asn Ile Thr Phe Thr Arg Lys Gly Glu Val Lys  
 1 5 10 15  
 Ser Val Val Phe Asn Ile Leu Asn Val Leu Gly Glu Leu Asp Thr Val  
 20 25 30  
 Leu Ala Glu Asn Arg Gly Tyr Ser Leu Tyr Ala Gln Thr Asn His Ser  
 35 40 45  
 Ser Asp Ile Trp Lys His Pro Gly Val His Phe Phe Pro Asn Ser Lys  
 50 55 60  
 Met Tyr Val Asp Asn Val Ala Asn Trp Ile Glu Ala His Gln Asn Gly  
 65 70 75 80  
 Ser Gln Leu Lys Ser Glu Ala Pro Glu Asp Asp Ile Asp Ser Leu Leu  
 85 90 95

## 19895

Asp Met Met Asp Asn Phe Gly Lys Ala  
 100 105

<210> 44036  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

<400> 44036  
 Phe Val Arg Phe Ser Ile Ser His Gln Leu Ser Leu Phe Leu Ile Lys  
 1 5 10 15  
 Ile Glu Gln Ala Arg Phe Gly Gly Ser Trp Asn Phe Asn Phe Phe Ile  
 20 25 30  
 Ala Asn Asn Lys Phe Met Arg Leu Ile Ile Lys Phe Gly Tyr His Ser  
 35 40 45  
 Asp Val Asp Thr Val Lys Lys Ile Asn Gly Tyr Gly Phe Gln Gln Trp  
 50 55 60  
 Thr Asn Gln Ile Cys Ile Gly Asn Lys  
 65 70

<210> 44037  
 <211> 126  
 <212> PRT  
 <213> A.fumigatus

<400> 44037  
 Gln Val Met Phe Leu Glu Arg Glu Thr Asp Asp Ile Ile Gln Leu Val  
 1 5 10 15  
 Gln Met Ser Phe Cys Pro Gly Glu Gly Ser Pro Val Gly Leu Thr Pro  
 20 25 30  
 Ser His Glu Gly Ser Ala Glu Leu Thr Asn Gly Thr Asn Lys Thr Asp  
 35 40 45  
 Ser Thr Thr Gly Gln Gln Glu Leu Glu Asn Asn Leu Thr Asp Val Val  
 50 55 60  
 Cys Glu Cys Leu Gly Leu Glu Ile Gln Asp Val Asp Ala Asp Lys Ser  
 65 70 75 80  
 Phe Trp Asp Leu Gly Ala Gln Ser Met Asp Ala Leu Lys Leu Gln His  
 85 90 95  
 Leu Cys Glu Lys Arg Gly Val Arg Val Arg Leu Arg Asp Ile Phe Val  
 100 105 110  
 Ser Arg Ser Leu Leu Glu Leu Ala Thr Cys Ala Val Ile Ile  
 115 120 125

<210> 44038  
 <211> 120  
 <212> PRT  
 <213> A.fumigatus

<400> 44038  
 Lys Phe Leu Glu His Gln Ile Val Ser Trp Asp Phe Ser Asn Tyr Phe  
 1 5 10 15  
 Ser Asn Gly Ile Lys Gly Ser Trp Arg Thr Asn Asp Phe Val Arg Leu  
 20 25 30  
 Met Glu Arg Arg Met Glu Leu Glu Val Val Tyr Gly His Ser Leu Glu  
 35 40 45  
 Thr Ile Thr Thr Asp Cys Lys Pro Leu Tyr Lys Arg Gln Leu Asn Glu

## 19896

```

      50              55              60
Asp Phe Val Ser Thr Ile Lys Asn Ala Tyr Thr Lys Met Asn Glu Thr
65              70              75              80
Phe Tyr Lys Gln Gly Glu Tyr His Leu Asn Ile Ala Asp Asn Ile Glu
      85              90              95
Thr Ile Val Leu Gln Pro Phe Ser Lys Trp Cys Thr Glu His Glu Gln
      100              105              110
Arg Val Lys Leu Tyr Glu Ser Thr
      115              120

```

&lt;210&gt; 44039

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44039

```

Gln Asp Lys Leu Lys Ala Leu Lys Asn Ala Gln Tyr Leu Val Glu Lys
1              5              10              15
Leu Gln Lys Lys Tyr Phe Asn Lys Cys Arg Met Leu Glu Glu Phe Lys
      20              25              30
Ser His Tyr Thr Glu Lys Glu Leu Gln Glu Glu Leu Asn Asp Leu Ser
      35              40              45
Phe Gln Lys Asp Arg Ala Ala Lys Thr Asn Thr Asp Gly Ser Lys Glu
      50              55              60
Glu Asp Asp Asn Asp Thr Ala Asp Glu Glu Ile Tyr Glu Phe Thr His
65              70              75              80
Ala Lys Tyr Asp Thr Lys Gln Met Lys Ala Leu Leu Lys Ala Met Leu
      85              90              95
Thr Glu Val Pro Met Gly Pro His Lys Val Ala Ile Leu Gly Thr Tyr
      100              105              110
Gln Asn Val Ser Thr Gly Ser Asn Ile Thr Lys Trp Leu Leu Glu Asn
      115              120              125
Met Pro Glu Phe Asn Lys Asn Leu Asp Lys Ala Glu Val Phe Gly Gln
      130              135              140
Asp Leu Val Arg Asn Asp Phe Val Phe Tyr His Gly Arg Trp Lys Glu
145              150              155              160
Pro His Leu Arg

```

&lt;210&gt; 44040

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (71)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44040

```

Thr Gly Lys Ser Thr Thr Lys Asn Lys Asn Pro Phe Asp Leu Ile Met
1              5              10              15
Ser Ser Glu His Ser Lys Ser Phe Asp Gly Asp Leu Thr Ser His Arg
      20              25              30
Ser Val Glu Tyr Tyr Asp Asp Ser Met Asn Ser Ser Gly Leu Pro Phe
      35              40              45

```



## 19897

```

Asn Phe Leu Ala Pro Ser Gln Val Arg Gly Ser Thr Phe Ile Met Asp
 50          55          60
Ser Asn Ile Ser Thr Ile Xaa Asn Ile Lys Val Ile Cys Arg Phe Arg
65          70          75          80
Leu Glu Ile Glu Lys Glu Leu Gln Lys Gly Lys Leu Ile Val Glu Phe
          85          90          95
Pro Asn Thr Gln Thr Val Thr Leu Tyr Gly Lys Asp Tyr Thr Thr His
          100          105          110
Tyr Ser Phe Asp Arg Val Phe Ser Pro Glu Ala Ser Gln Leu Asp Ile
          115          120          125
Tyr Gln Phe Ser Ile Ala Glu Thr Val Asp Asp Leu Ile Asn Gly Tyr
          130          135          140
Asn Gly Thr Val Leu Ala Tyr Gly Gln Thr Gly Ser Gly Lys Ser Tyr
145          150          155          160
Thr Met Leu Gly Gly Pro Gln Leu Leu Asp Pro Asn Ser Lys Gly Ile
          165          170          175
Ile Pro Arg Ile Ser His Glu Ile Phe Glu Arg Ile Ser Ala Asn Glu
          180          185          190
Ala Val Ser Ser Glu Val Glu Tyr Ser Val Cys Val Ser Phe Met Glu
          195          200          205
Ile His Met Glu Gln Ile Arg Asp Leu Ile Asp Val Val Asn Asn Glu
          210          215          220
Phe Asp His Lys Phe Thr Ile His Glu Asp Lys Leu Asn Gly Ile Tyr
225          230          235          240
Ile Phe Thr His Gly Arg Trp Lys Glu Pro Arg Tyr
          245          250

```

&lt;210&gt; 44041

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44041

```

Ala Ser Ala Asp Leu Pro Arg Arg Gly Glu Asp Val Ser Tyr Leu Lys
1          5          10          15
Leu Arg Pro Asp Arg Val Ala Cys Gln Asp Ala Thr Ala Gln Met Ala
          20          25          30
Ile Leu Gln Phe Met Ser Ala Gly Ile Pro Gln Val Ala Thr Pro Ser
          35          40          45
Thr Val His Cys Asp His Leu Ile Gln Ala Gln Val Gly Gly Pro Lys
          50          55          60
Asp Leu Ala Arg Ala Ile Asp Leu Asn Lys Glu Val Tyr Asp Phe Leu
65          70          75          80
Ser Thr Ala Cys Ala Lys Tyr Asn Leu Gly Phe Trp Lys Pro Gly Ser
          85          90          95
Gly Ile Ile His Gln Ile Val Leu Glu Asn Tyr Ala Phe Pro Gly Ala
          100          105          110
Leu Leu Ile Gly Thr Asp Ser His Thr Pro Asn Ala Gly Gly Leu Gly
          115          120          125
Gln Leu Ala Ile Gly Val Gly Gly Ala Asp Ala Val Asp Val Met Ser
          130          135          140
Gly Leu Pro Trp Glu Leu Lys Ala Pro Lys Ile Ile Gly Val Lys Leu
145          150          155          160
Asn Gly

```

## 19898

<210> 44042  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

<400> 44042  
 Met Ser Gly Trp Thr Ser Pro Lys Asp Ile Ile Leu Lys Leu Ala Gly  
 1 5 10 15  
 Ile Thr Thr Val Lys Gly Gly Thr Gly Ser Ile Val Lys Tyr Phe Gly  
 20 25 30  
 Ser Gly Val Asp Thr Phe Ser Cys Thr Gly Met Gly Tyr Ile Cys Asn  
 35 40 45  
 Met Gly Ala Glu Ile Gly Ala Thr Thr Ser Val Phe Pro Phe Asn Asp  
 50 55 60  
 Ser Met Val Asp Tyr Leu Asn Ala Thr Gly Arg Ser Asp Ile Ala Gln  
 65 70 75 80  
 Phe Ala Pro Val

<210> 44043  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (147)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44043  
 Gly Lys Lys Val Asp Glu Leu Asn Gly Asp Ile Glu Phe Lys Gly Ile  
 1 5 10 15  
 Asp Phe Thr Tyr Pro Ser Arg Pro Glu Ser Gly Ile Phe Lys Asp Leu  
 20 25 30  
 Asn Leu His Ile Lys Gln Gly Glu Asn Val Cys Leu Val Gly Pro Ser  
 35 40 45  
 Gly Ser Gly Lys Ser Thr Val Ser Gln Leu Leu Leu Arg Phe Tyr Asp  
 50 55 60  
 Pro Glu Lys Gly Thr Ile Gln Ile Gly Asp Asp Val Ile Thr Asp Leu  
 65 70 75 80  
 Asn Leu Asn His Tyr Arg Ser Lys Leu Gly Tyr Val Gln Gln Lys Pro  
 85 90 95  
 Leu Leu Phe Ser Gly Thr Ile Lys Glu Asn Ile Leu Phe Gly Lys Glu  
 100 105 110  
 Asp Ala Thr Asp Glu Glu Ile Asn Asn Ala Leu Asn Leu Ser Tyr Ala  
 115 120 125  
 Ser Asn Phe Val Arg His Leu Pro Asp Gly Leu Asp Thr Lys Ile Gly  
 130 135 140  
 Ala Ser Xaa Ser Thr Gln Leu Ser Gly  
 145 150

<210> 44044  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

## 19899

&lt;400&gt; 44044

```

Leu Lys Gln Arg Val Ser Leu Ala Arg Thr Leu Ile Arg Asp Pro Asn
1          5          10          15
Ile Leu Ile Leu Asp Asp Ala Thr Ser Ala Leu Asp Ser Val Ser Glu
          20          25          30
Glu Ile Val Met Leu Asn Leu Ile Gln Leu Asn Lys Asn Arg Arg Val
          35          40          45
Thr Leu Ile Ser Ile Ala His Arg Leu Ser Thr Ile Asn Asn Ser Asp
          50          55          60
Arg Asn Ile Val Phe Asn Gln Asp Gly Gln Ile Val Asp Asp Cys Asn
65          70          75          80
Phe Met Asn Cys Ile Met Ile Pro Thr Ser Phe His Lys Leu Leu
          85          90          95

```

&lt;210&gt; 44045

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44045

```

Arg Ser Ser Phe Ser Thr Ala Asn Phe Ser Leu Phe Lys Ser Tyr Thr
1          5          10          15
Ser Phe Phe Phe Leu Phe Phe Phe Leu Lys Asn Thr Leu Pro Ser Asn
          20          25          30
Met Thr Asp Thr Pro Thr Glu Gly Ala Ser Tyr Ser Glu Gln Ile Leu
          35          40          45
Glu Ser Ala Arg Arg Asn Asn Thr Glu Leu Leu Leu Ser Ile Lys Val
          50          55          60
Glu Leu Asn Asn Asp Gln Glu Lys Trp Ala Glu Leu Ile Asn Thr Thr
65          70          75          80
Lys Glu Val Ile Thr Asp Asn Thr Pro Leu His Leu Ala Cys Gln Leu
          85          90          95
Gly Asn Trp Glu Phe Ile Asp Ile Val Leu Asp Met Lys Ala Phe Glu
          100          105          110
Ile Asp Pro Gln Asn Arg Glu Gly Glu Thr His Tyr Met Trp Leu Leu
          115          120          125
Asn Ile Pro Thr Thr Lys Ser Leu Asn Thr Asp Thr Leu Leu Leu Thr
          130          135          140
Ile Cys
145

```

&lt;210&gt; 44046

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (32)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44046

```

Leu Ser Cys Trp Arg Val His Ser Met Arg Phe Leu Trp Ser Pro Thr
1          5          10          15
Asp Ala Glu Thr Leu Ala Glu Phe Glu Lys Leu Lys Val Trp Ile Xaa
          20          25          30

```

## 19900

Thr Leu Ile Arg Leu Phe Phe Thr Leu Phe Thr Leu Ile Leu Gln Ile  
 35 40 45  
 Val Ser Asn Tyr Lys Lys Thr His Ser Phe Asn Phe Phe Arg Ala Gly  
 50 55 60  
 Ile Leu Asn Ala  
 65

<210> 44047

<211> 63

<212> PRT

<213> A.fumigatus

<400> 44047

Ser Leu Gly Tyr Lys Trp Cys Leu Ser Leu Ile Leu Gly Ser Glu His  
 1 5 10 15  
 Ala Ser Ser Ile Trp Ser Thr Ile Lys Tyr Pro Cys Ser Gly Ser Ser  
 20 25 30  
 Leu Leu Val Tyr Leu Thr Ala Thr Cys Asn Gly Phe Leu Leu Leu Cys  
 35 40 45  
 Phe Ala Asp Gln Ser Gln Thr Leu Ser Cys Pro Ile Leu Tyr Leu  
 50 55 60

<210> 44048

<211> 185

<212> PRT

<213> A.fumigatus

<400> 44048

Asp Thr Arg Ser Gly Ala Ala Ala Gly Gly Gly Glu Asp Leu Gly Gly  
 1 5 10 15  
 Val Gly Val Glu Asp Ala Val His Asp Val Leu Glu Glu Gly Leu Glu  
 20 25 30  
 Ala Ala Ala Asp Glu Leu Asp Val Gly Val Ser Gly Gly Glu Ala  
 35 40 45  
 Glu Glu Glu Asp Ala Gly Asp Glu Gly Arg Asp Asp His Cys Ala Phe  
 50 55 60  
 Ala Ala Asp Val Leu Asp Val Asp Gly Val Ala Arg Gln Asp Gly Ala  
 65 70 75 80  
 Trp His Ala Asp Asn Gly Ser Asp Gly Val Val Ala Val Gly Asp Val  
 85 90 95  
 Gly Gly Gly Leu Gly Gly Ala Ala Gly Val Phe Asp Val Leu Gly Gln  
 100 105 110  
 Glu Arg Val Glu Glu Gly Val Ala His Ser Asp Cys Gly Pro Ala Glu  
 115 120 125  
 Pro Glu Asp Asn Arg Cys Trp Arg His Val Ser His Gly Leu Ser Arg  
 130 135 140  
 Leu Gly Arg Arg Lys Gly Gly Gly Glu Arg Val Gly Ala His Thr Arg  
 145 150 155 160  
 Tyr Phe Ala Phe Phe Phe Ser Ile Tyr Val Tyr Val Ser Arg Tyr  
 165 170 175  
 Asp Gln Leu Leu Ala Gly Ala Leu Leu  
 180 185

<210> 44049

<211> 160

<212> PRT

## 19901

&lt;213&gt; A.fumigatus

&lt;400&gt; 44049

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Pro | Thr | Leu | Ser | Pro | Pro | Pro | Phe | Leu | Leu | Pro | Ser | Leu | Asp | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Trp | Leu | Thr | Cys | Leu | Gln | Gln | Arg | Leu | Ser | Ser | Gly | Ser | Ala | Gly |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Gln | Ser | Glu | Trp | Ala | Thr | Pro | Ser | Ser | Thr | Arg | Ser | Cys | Pro | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Ser | Lys | Thr | Pro | Ala | Ala | Pro | Pro | Arg | Pro | Pro | Pro | Thr | Ser | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Ala | Thr | Thr | Pro | Ser | Leu | Pro | Leu | Ser | Ala | Cys | Gln | Ala | Pro | Ser |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Trp | Arg | Ala | Thr | Pro | Ser | Thr | Ser | Ser | Thr | Ser | Ala | Ala | Lys | Ala | Gln |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Trp | Ser | Ser | Arg | Pro | Ser | Ser | Pro | Ala | Ser | Ser | Ser | Ser | Ala | Ser | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Pro | Pro | Leu | Thr | Pro | Thr | Ser | Ser | Ser | Ala | Ala | Ala | Ala | Ser | Arg | Pro |
|     |     | 115 |     |     |     |     | 120 |     |     |     | 125 |     |     |     |     |
| Ser | Ser | Arg | Thr | Ser | Cys | Thr | Ala | Ser | Ser | Thr | Pro | Thr | Pro | Pro | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Ser | Pro | Pro | Pro | Ala | Ala | Ala | Pro | Glu | Arg | Val | Ser | Gln | Ala | Val |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |

&lt;210&gt; 44050

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44050

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Met | Ala | Asn | Met | Ser | Pro | Thr | Ala | Val | Ile | Leu | Trp | Phe | Cys | Trp |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Thr | Ile | Gly | Met | Gly | Tyr | Pro | Leu | Phe | Asn | Ala | Phe | Leu | Pro | Gln |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Ile | Lys | Asn | Ala | Gly | Gly | Ser | Thr | Glu | Ala | Ser | Thr | Tyr | Val | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Arg | Asn | Tyr | Ala | Ile | Thr | Ser | Ile | Val | Gly | Val | Pro | Gly | Ser | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ala | Cys | Tyr | Thr | Val | Asp | Ile | Lys | Tyr | Ile | Gly | Arg | Lys | Gly | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Met | Val | Ile | Ser | Thr | Leu | Ile | Thr | Gly | Val | Leu | Leu | Phe | Cys | Phe | Thr |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Ser | Thr | Asn | Ser | Asn | Val | Gln | Leu | Val | Cys | Ser | Cys | Leu | Glu | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Phe | Gln | Asn | Ile | Met | Tyr | Gly | Val | Leu | Tyr | Ala | Tyr | Thr | Pro | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Phe | Pro | Ala | Pro | Ser | Arg | Gly | Thr | Gly | Thr | Gly | Ile | Ser | Ser | Cys |
|     | 130 |     |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |
| Leu | Asn | Arg | Ile | Ala | Gly | Leu | Cys | Ala | Pro | Leu | Val | Ala | Ile | Tyr | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Ser | Ser | Asn | Pro | Asn | Ser | Pro | Ile | Tyr | Ala | Ser | Gly | Gly | Leu | Ile |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | Ala | Ser | Phe | Val | Ala | Met | Cys | Cys | Arg | Pro | Ile | Glu | Thr | Val | Phe |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Thr | Ala | Gly | Leu | Glu | Gly | Ala | Ala | Pro |     |     |     |     |     |     |     |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     |     |     |     |     |

## 19902

<210> 44051  
 <211> 230  
 <212> PRT  
 <213> A.fumigatus

<400> 44051

```

Arg Phe Asn Gly Gly Ser Thr Gly Asn Ser Ser Met Arg Ser Trp Tyr
1      5      10      15
Ala Cys Val Asn Thr Asn Leu Ala Ala Ala Thr Gly Gly Leu Thr Trp
      20      25      30
Met Leu Val Asp Trp Phe Arg Thr Gly Gly Lys Trp Ser Thr Val Gly
      35      40      45
Leu Cys Met Gly Ala Ile Ala Gly Leu Val Gly Ile Thr Pro Ala Ala
      50      55      60
Gly Tyr Val Pro Val Tyr Thr Ser Val Ile Phe Gly Ile Val Pro Ala
65      70      75      80
Ile Ile Cys Asn Phe Ala Val Asp Leu Lys Asp Leu Leu Gln Ile Asp
      85      90      95
Asp Gly Met Asp Val Trp Ala Leu His Gly Val Gly Gly Phe Val Gly
      100      105      110
Asn Phe Met Thr Gly Leu Phe Ala Ala Asp Tyr Val Ala Met Ile Asp
      115      120      125
Gly Thr Glu Ile Asp Gly Gly Trp Met Asn His His Trp Lys Gln Leu
      130      135      140
Gly Tyr Gln Leu Ala Arg Asn Cys Cys Ile Ala Ala Trp Ser Phe Thr
145      150      155      160
Val Thr Ser Ile Ile Leu Leu Ala Met Asp Arg Ile Pro Phe Leu Arg
      165      170      175
Ile Arg Leu His Asp Asn Glu Asp Met Leu Gly Tyr Asp Leu Ala Gln
      180      185      190
Ile Gly Glu Tyr Ala Tyr Tyr Ala Asp Asp Asp Pro Asp Thr Asn Pro
      195      200      205
Tyr Val Leu Glu Pro Ile Arg Ser Thr Thr Ile Ser Gln Pro Leu Pro
      210      215      220
His Ile Asp Ala Val Ala
225      230

```

<210> 44052  
 <211> 243  
 <212> PRT  
 <213> A.fumigatus

<400> 44052

```

Pro Gly Ile Ala Pro Ser Arg Ala Gly Leu Ile Ile Lys Lys Pro His
1      5      10      15
Asp Pro Ala Gln Gln Gln Gln Glu Leu Gln Pro Gln Asp Gln Ser Gln
      20      25      30
Ser Ile Glu Ser Ile Val Thr Ser Cys Phe Glu Ser Leu Gln Lys Asn
      35      40      45
Gly Phe Ile Asn Tyr Phe Gly Met Gln Arg Phe Gly Ser Phe Ser Ile
      50      55      60
Ser Thr His Glu Phe Gly Lys Phe Ile Leu Asn Glu Asn Trp Gln Glu
65      70      75      80
Phe Val Glu Leu Leu Leu Ser Asp Gln Glu Ser Val Ala Pro Gly Ser
      85      90      95

```

## 19903

```

Ile Glu Ala Arg Lys Ile Trp Lys Gln Thr Arg Asp Pro Lys Leu Thr
      100                      105                      110
Leu Asn Lys Leu Pro His Tyr Phe Val Ala Glu Thr Ala Val Leu Arg
      115                      120                      125
Val Leu Gln Asn Glu Ser Pro Gln Gln Lys Asp Asp Asn Asn Thr Val
      130                      135                      140
Tyr Ser Ser Asn Ser Tyr Leu Lys Ala Ile Gln Ala Ile Pro Lys Asn
145                      150                      155                      160
Leu Arg Met Met Tyr Gly His Ala Tyr Gln Ala Tyr Met Trp Asn Leu
      165                      170                      175
Val Ala Ser Lys Arg Ile Glu Leu Tyr Gly Leu Asn Leu Ile Glu Gly
      180                      185                      190
Asp Leu Val Cys Glu Asp Pro Ile Thr Asn Pro Asp Ile Val Asp Glu
      195                      200                      205
Asp Val Val Tyr Leu Asn Glu Ala Lys Val Arg Ser Leu Thr Lys Gln
      210                      215                      220
Asp Ile Glu Ser Gly Lys Tyr Thr Ile Phe Asp Val Ile Leu Pro Ser
225                      230                      235                      240
Pro Gly Cys

```

&lt;210&gt; 44053

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (182)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44053

```

Pro Ser Phe Glu Asn Leu Asn Ile Pro Cys Ile Tyr Ile Ser Ile Gln
1      5      10      15
Ala Val Leu Ser Phe Pro Ala Ser Gly Lys Thr Thr Gly Val Val Ile
      20      25      30
Asp Ser Gly Asp Gly Val Thr His Val Val Pro Val Tyr Glu Gly Phe
      35      40      45
Ala Leu Pro Pro Ser Ile Lys Arg Met Asp Ile Ala Gly Arg Asp Ile
      50      55      60
Thr Glu Ser Leu Ala Phe Asn Ile Arg Arg Met Thr Gly Val Ala Leu
65      70      75      80
Gln Ser Ser Ser Glu Leu Glu Ile Val Arg Leu Ile Lys Glu Gln Asn
      85      90      95
Cys Phe Ile Ser Lys Asp Pro Val Arg Asp Glu Lys Lys Tyr Gly Ser
      100     105     110
His Tyr Ser Arg Asn Asn Pro Asn Asn Glu Leu Met Ser Thr Tyr Lys
      115     120     125
Leu Pro Asp Gly His Glu Ile Gln Leu Gly Val Glu Arg Phe Arg Ala
      130     135     140
Thr Glu Met Leu Phe Asn Pro Gln Leu Ile Gly His Glu Ser Pro Gly
145     150     155     160
Ile His Glu Leu Thr Ser Leu Ala Ile Ala Lys Thr Asp Leu Asp Leu
      165     170     175
Arg Ser Thr Leu Tyr Xaa Asn Ile Ile Leu Ser Gly Gly Asn Thr Leu
      180     185     190

```

## 19904

```

Leu Lys Asn Val Gly Asp Arg Met Leu Lys Glu Leu Lys Asp Leu Gln
    195                                200                205
Gln Pro Leu Arg Glu Asp Arg Lys Met Ser Met Trp Asn Lys Asn Val
    210                                215                220
Gln Asn Asp Val Tyr Asn Thr Lys Met Lys Val Lys Ile Tyr Cys Thr
225                                230                235                240
Pro Glu Arg Lys Tyr Ser Thr Trp Ile Gly Gly Ser Ile Leu Ala Gly
    245                                250                255
Val Ser Thr Phe Lys Lys Ile Val Gly Tyr Ile Gly Lys Ile Ser
    260                                265                270

```

<210> 44054  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44054
Leu Pro Tyr Phe Phe Ser Ser Leu Thr Gly Ser Phe Asp Met Lys Gln
1                                5                                10                15
Phe Cys Ser Leu Ile Asn Leu Thr Ile Ser Asn Ser Glu Leu Leu Cys
    20                                25                30
Asn Ala Thr Pro Val Ile Leu Arg Ile Leu Asn Ala Lys Asp Ser Val
    35                                40                45
Ile Ser Leu Pro Ala Ile Ser Ile Leu Phe Ile Asp Gly Gly Asn Ala
    50                                55                60
Asn Pro Ser Tyr Thr Gly Thr Thr
65                                70

```

<210> 44055  
 <211> 73  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44055
Phe Thr Ile Cys Phe Ser Phe Phe Phe Lys Met Gly Ser Thr Ile Cys
1                                5                                10                15
Ser Asn Lys Glu Ser Lys Ile Asn Arg Gln Ile His Met Leu Arg Arg
    20                                25                30
Ser Ala Cys Thr Ser Lys Ile Val Leu Asp Arg Phe Phe Trp Ala Ser
    35                                40                45
Gly Val Tyr Asn Phe Val Val Phe Thr Thr Lys Lys Val Thr Phe Tyr
    50                                55                60
Trp Ile Tyr Tyr Ile Asn Gln Ile Ile
65                                70

```

<210> 44056  
 <211> 264  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44056
Ser Arg Ser Phe Gln Pro Arg Gly Glu Asp Met Leu Arg Ser Thr Thr
1                                5                                10                15
Arg Asn Thr Leu Arg Leu Ala Thr Arg Tyr Thr Lys Val Ser Ser Ser
    20                                25                30
Ile Ile Arg His Thr Leu Pro Thr Met Phe Gly Ser Ser Thr Gly Gly

```



## 19905

```

      35              40              45
Ser Gly Ile Arg Phe Ala Ser Gln Leu Ala His Val Lys Thr Pro Pro
  50              55              60
Asn Leu Gln Asn Glu Pro Val Lys Asn Phe Ser Phe Lys Asp Thr Lys
65              70              75              80
Asp Trp Asp Leu Leu Arg Ala Ser Ile Thr Lys Phe Thr Asp Glu Gly
      85              90              95
Ala Leu Lys Val Pro Leu Val Val Gly Gly Lys Lys Ile Tyr Arg Asp
      100              105              110
Glu Ile Lys Thr Gln Val Asn Pro Ala Lys His Ser Gln Val Leu Ala
      115              120              125
Asp Val Ser Gln Ala Thr Pro Glu Asp Ile Ile Ala Ala Ile Asp Ala
      130              135              140
Ala Lys Ala Ala Lys Ala Lys Trp Ala Thr Thr Ser Trp Thr Asp Arg
145              150              155              160
Ala Ala Ile Phe Leu Lys Ala Ala Asp Leu Ile Ser Thr Lys Tyr Arg
      165              170              175
Tyr Asp Met Leu Ala Ala Thr Met Leu Gly Gln Gly Lys Asn Val Tyr
      180              185              190
Gln Ala Lys Ile Asp Cys Val Ala Glu Leu Ile Asp Phe Phe Lys Phe
      195              200              205
Asn Val Lys Tyr Ala Glu Glu Met Tyr Gln Gln Gln Pro Ile Gln Thr
      210              215              220
Ser Pro Gly Val Trp Asn Arg Ala Glu Tyr Lys Pro Leu Glu Arg Phe
225              230              235              240
Cys Leu Cys Cys Tyr Ser Ile Gln Phe His Cys His Cys Cys Gln Phe
      245              250              255
Gly Trp Ser Ser Cys Phe Asn Gly
      260

```

<210> 44057  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44057
Leu Ile Ser Leu Asn Leu Met Leu Asn Met Leu Lys Lys Cys Ile Asn
1              5              10              15
Asn Asn Gln Tyr Lys Leu Leu Leu Val Phe Gly Thr Val Leu Asn Ile
      20              25              30
Asn Leu Trp Lys Gly Phe Val Tyr Ala Val Thr Pro Phe Asn Phe Thr
      35              40              45
Ala Ile Ala Ala Asn Leu Val Gly Ala Pro Ala Leu Met Gly Asn Thr
      50              55              60
Val Val Trp Lys Thr Ser Ala Thr Pro Ala Leu Ser Asn
65              70              75

```

<210> 44058  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44058
Thr Lys Pro Phe Gln Arg Phe Ile Phe Ser Thr Val Pro Asn Thr Arg
1              5              10              15
Arg Ser Leu Tyr Trp Leu Leu Leu Ile His Phe Phe Ser Ile Phe Asn

```

## 19906

```

                20                25                30
Ile Lys Phe Lys Glu Ile Asn Gln Phe Ser Asn Thr Ile Asn Phe Cys
      35                40                45
Leu Ile Asn Ile Phe Thr Leu Ser Gln His Ser Ser Ser Gln His Ile
      50                55                60
Ile Ser Ile Phe Gly Arg Asn
65                70

```

<210> 44059  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44059
Asn Ala Ile Lys Phe Asn Glu Ala Arg Phe Asn Ala Gln Leu Ser Tyr
1                5                10                15
Phe Thr Lys Ser Asn Lys Ala Lys Tyr Thr Leu Thr Asp Asn Thr Ile
      20                25                30
Thr Gly Val Asp Glu Ala Thr Thr Leu Lys Thr Asn Ser Leu Val Leu
      35                40                45
Phe Glu Asn Glu Val Phe Leu Phe Phe Leu Leu Val Leu Ser Ser Phe
      50                55                60
Gly Asp Leu Thr
65

```

<210> 44060  
 <211> 286  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (118)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 44060
Gln Ile Ser Lys Ile Thr Val Leu Asn Pro Gln Ile Leu Trp Arg Phe
1                5                10                15
Ile Ile Ser Leu Leu Ile Val Thr Asp Asp Asn His Glu Gln Leu Cys
      20                25                30
Phe Ile Ser Ser Ser Ile Leu Ile Lys Leu Leu Lys Leu Val Pro Leu
      35                40                45
Leu Leu Gly Ser Thr Cys Arg Val Thr Asn Asp Ser Leu Glu Thr Leu
      50                55                60
Leu Thr Ala Leu Leu Asn Arg Leu Ser Lys Lys Cys Asp Thr Ile Ile
65                70                75                80
His Thr His Ile Thr Val Leu Phe Pro Ser Ser Ser Asp Gln Ile Leu
      85                90                95
His Gln Met Ala Phe Glu Asp Ser Cys Leu Pro Asn Ile Asp Leu Asn
      100                105                110
Lys Ser Ile Leu Glu Xaa Thr Val Asp Ser Gln Leu Leu Leu Glu Phe
      115                120                125
Ile Thr Cys Thr Ala Gln Ile Leu Ser Phe Met Lys Ser Asn Asp Tyr
      130                135                140
Asp Ile Leu Thr Ala Phe Gln Ser Asn Tyr Val Lys Ser Pro Asn Glu
145                150                155                160

```

## 19907

Asp Lys Thr Ser Lys Lys Lys Arg Lys Thr Ser Phe Ser Asn Lys Thr  
                   165                  170                  175  
 Arg Glu Phe Val Phe Asn Val Val Ala Ser Ser Thr Pro Val Ile Val  
                   180                  185                  190  
 Leu Ser Val Asn Val Tyr Leu Ala Leu Leu Leu Leu Val Lys Tyr Asp  
                   195                  200                  205  
 Asn Trp Ala Leu Asn Leu Ala Ser Leu Asn Leu Ile Ala Phe Tyr Leu  
                   210                  215                  220  
 Lys Asn Leu Lys Pro Ser Gln Asp Gly Asp Lys Ala Leu Ile Phe Arg  
 225                  230                  235                  240  
 Ser Tyr Lys Lys Leu Phe Pro Arg Ile Ile Ser Met Leu Glu Leu Lys  
                   245                  250                  255  
 Asn Asp Tyr Thr Gly Cys Met Asn Lys Lys Thr Lys Asn Pro Thr Ser  
                   260                  265                  270  
 Ser Ala Ser Val Ser Ser Pro Arg Gly Trp Lys Glu Pro His  
                   275                  280                  285

&lt;210&gt; 44061

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44061

Arg Ile Thr Phe Leu Ser Phe Ile Arg Thr Asn Cys His Cys Arg Glu  
 1                  5                  10                  15  
 Arg Ile Val Asp Val Asn Asp Gly Lys Thr Thr Met Leu Asn Lys Phe  
                   20                  25                  30  
 Phe Arg Phe Glu Gly Glu Gly Phe Met Thr Cys Leu Tyr Ser Trp Ile  
                   35                  40                  45  
 Ser Lys Ile Thr Lys Phe Gln Ser Thr Ile Cys Asn Asn Glu Lys Ile  
                   50                  55                  60  
 Pro His Asn Gln Lys Cys  
 65                  70

&lt;210&gt; 44062

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44062

Thr Cys His Lys Ser Phe Ser Phe Lys Ser Lys Lys Phe Ile Gln His  
 1                  5                  10                  15  
 Cys Cys Phe Ser Ile Ile Asp Ile His Tyr Ser Leu Ser Thr Met Thr  
                   20                  25                  30  
 Ile Ser Pro Asn Lys Arg Gln Lys Arg Asp Ser Ser Ser Pro Lys Lys  
                   35                  40                  45  
 His Leu Ile Leu Asn Ala Phe Asp Met Met Cys Pro Ser Leu Gln Thr  
                   50                  55                  60  
 Ala Gly Leu Trp Ser His Pro Glu Asp Lys Ser Arg Asp Tyr Asn Thr  
 65                  70                  75                  80  
 Ile Glu Tyr Trp Thr Asn Leu Ala Lys Leu Leu Glu Lys Gly Lys Phe  
                   85                  90                  95  
 Asn Ala Leu Phe Ile Ala Asp Val Leu Gly Gly Tyr Asp Val Tyr Asn  
                   100                  105                  110  
 Gly Pro Arg Asn Leu Thr Ala Ala Ala Lys Ser Gly Ala Gln Trp Pro  
                   115                  120                  125

## 19908

Ile Asn Leu Leu Pro Arg Ala Leu Glu Gly Thr Ala Leu  
 130 135 140

<210> 44063  
 <211> 110  
 <212> PRT  
 <213> A.fumigatus

<400> 44063  
 Asn Asn Ile Arg Ser Leu Leu Tyr Phe Glu Leu Ile Leu Asn Leu Gly  
 1 5 10 15  
 Val Ile Leu Leu Ile Asn Phe Met Cys Gln Asp Met Leu Ser Phe Tyr  
 20 25 30  
 Val Tyr Phe Glu Ile Ser Leu Ala Pro Leu Phe Ile Leu Ile Gly Leu  
 35 40 45  
 Tyr Gly Ala Asn Asn Arg Asp Lys Ala Ala Asp Tyr Ile Leu Ile Tyr  
 50 55 60  
 Thr Leu Phe Ser Ser Leu Phe Met Leu Leu Ala Ile Gly Thr Tyr Glu  
 65 70 75 80  
 Val Leu Ile Gly Asn Thr Asp Tyr Gln Ala Val Ser Leu Val Val Leu  
 85 90 95  
 Ser Thr Asp Leu Leu Leu His His Gly Ala Gly Arg Asn Arg  
 100 105 110

<210> 44064  
 <211> 260  
 <212> PRT  
 <213> A.fumigatus

<400> 44064  
 Val Trp Ser Phe His Ala Val Val Lys Asn Glu Ser Ile Asn Pro Gln  
 1 5 10 15  
 His Arg Asn Leu Phe Ala Lys Phe Asp Phe Lys Leu Leu Ala Ser Leu  
 20 25 30  
 Phe Asn Ser Phe Asn Glu Phe Met Leu Ile Asp Ala Asp Thr Ile Leu  
 35 40 45  
 Met Lys Ser Pro Glu Phe Phe Phe Asn His Gln Ser Tyr Gln Gln Thr  
 50 55 60  
 Gly Ala Phe Phe Phe Lys Asp Arg Ser Pro Leu Leu Lys Arg Pro Ile  
 65 70 75 80  
 Thr Asp Gly Glu Phe Leu Ile Lys Met Gly Pro Ser Ser Ile Asp Ser  
 85 90 95  
 Ile Met Phe Asp Ile Pro Met Met Thr Gln Tyr Thr Thr His Arg Glu  
 100 105 110  
 Leu Phe Lys Gly Leu Arg Leu Tyr Met Glu Ser Gly Leu Val Met Ile  
 115 120 125  
 Asp Lys Gln Arg Arg Arg His Phe Asn Ser Ile Leu Met Met Asn Gln  
 130 135 140  
 Leu Lys Phe Ile His Pro Ile Ser Asn Ser Met Trp Gly Asp Lys Glu  
 145 150 155 160  
 Leu Cys Trp Leu Gly Phe Ala Ile His Gly Asp Glu His Tyr Lys Phe  
 165 170 175  
 Asn Asn His Phe Ala Ala Ala Ile Gly Gln Leu Thr Ser Asn Gln Tyr  
 180 185 190  
 Asn Lys Asp Arg Arg Thr Pro Leu Lys Ser Lys Glu Ile Cys Ala Ser  
 195 200 205

## 19909

His Pro Gly His Ile Ser Asp Glu Asp Asp Arg Ser Val Leu Trp Phe  
 210 215 220  
 Asn Ser Gly Phe Arg Phe Cys His Glu Ala Asn Asn Ile Asp Tyr Pro  
 225 230 235 240  
 Glu Glu Thr Arg Asn Asn Val Ile Leu Lys Phe Leu Asn Gly Arg His  
 245 250 255  
 Pro Leu Glu Ile  
 260

<210> 44065  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 44065  
 His Arg Leu Tyr Ile Lys His His Phe Arg Tyr Pro Leu Val Val Gln  
 1 5 10 15  
 Ser Val Ala Ile Leu Tyr Ile Thr Asp Gly Leu Ile Thr Leu Thr Val  
 20 25 30  
 Phe Thr Asn Val Ala Val Ser Thr Arg Pro Thr Leu Ser Met Ser Gly  
 35 40 45  
 Asp Tyr Thr Asn Arg Leu Ser Ile Ile Pro Leu Tyr Asn Met Pro Tyr  
 50 55 60  
 Lys Ser Tyr Tyr Tyr Ile Ile Asn Asp Tyr Leu Ser Arg  
 65 70 75

<210> 44066  
 <211> 145  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (97), (99)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44066  
 Lys Ile Ser Pro Ile Ile Asp Glu Leu Ser Glu Leu Phe Ile Asp Tyr  
 1 5 10 15  
 Pro Glu Ile Gln Ile Ile Lys Ile Asn Gly Asp Lys Asp Gly Lys Lys  
 20 25 30  
 Met Ser Lys Lys Tyr Val Asp Ile Gly Tyr Pro Thr Leu Leu Phe Phe  
 35 40 45  
 Tyr Asp Asp Gly Arg Lys Ile Glu Phe Asp Gly Ile Arg Asp Leu Thr  
 50 55 60  
 Ser Val Ser Asn Phe Ile Gln Gln Leu Ser Gly Ile Arg Leu Asn Glu  
 65 70 75 80  
 Ser Lys Ser Thr Asp Asn His Asp Glu Glu Glu Asn Thr Ala Lys  
 85 90 95  
 Xaa Glu Xaa Pro Phe Ser Gly Ser Asn Ser Asn Val Asn Asp Gly Asp  
 100 105 110  
 Glu Glu Thr Thr His Trp Met Asn Leu Asn Pro Glu Asn Leu Asn Lys  
 115 120 125  
 Lys Phe Ser Asn Pro Gln Phe Leu Trp Phe His Leu Glu His Pro Gly  
 130 135 140  
 Val

145

&lt;210&gt; 44067

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (95)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44067

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Met | Val | Thr | Ser | Ser | Thr | Ala | Asn | Asp | Asn | Asn | Asn | Glu | Asp | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Ile | Ser | Lys | Asn | Trp | Val | Trp | Val | Pro | Asn | Gln | Gln | Asp | Leu | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Lys | Gly | Tyr | Ile | Thr | Asp | Tyr | Leu | Pro | Asp | Gly | Lys | Cys | Lys | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asn | Val | Val | Lys | Gly | Gln | Glu | Ser | Ser | His | Asp | Ser | Thr | Ile | Ile | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Gln | Asp | Lys | Leu | Glu | Asn | Cys | Asn | Pro | Val | Lys | Phe | Asn | Lys | Cys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Asp | Met | Ala | Glu | Leu | Thr | His | Leu | Asn | Glu | Pro | Ser | Val | Xaa | Tyr |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Leu | Tyr | Leu | Arg | Tyr | Leu | Asp | Asp | Leu | Ile | Tyr | Thr | Tyr | Ser | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Phe | Leu | Val | Ala | Ile | Asn | Pro | Tyr | Lys | Leu | Leu | Thr | Ile | Tyr | Asn |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gln | Ser | Ile | Leu | Met | Lys | Tyr | His | Gln | Tyr | Asn | Asn | Val | Thr | Thr | Asn |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | Asn | Asp | Tyr | Gln | Ser | Lys | Asn | Gly | Ser | Asn | Cys | Asn | Tyr | Tyr | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gln | Arg | Asn | Ser | Pro | Pro | His | Phe | Cys | Ala | Val | Ala | Glu | Ile | Asp | Phe |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |

&lt;210&gt; 44068

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44068

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Pro | Cys | Gln | Leu | Leu | Lys | Ile | Leu | Ile | Pro | Asn | Phe | Ile | Thr | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Phe | Asn | Ile | Asn | His | Asn | His | Asn | Leu | Val | Leu | Ile | Thr | Arg | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Gln | Phe | Gln | Asn | Tyr | Leu | Phe | Leu | Asn | Thr | Tyr | Lys | Ser | Lys | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Thr | Thr | Ser | Phe | Ile | Asn | His | Ile | Pro | Ser | Tyr | Phe | Asn | Thr | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Ala | Leu | Val | Ser | His | Leu | Ile | Ile |     |     |     |     |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 44069

&lt;211&gt; 65

&lt;212&gt; PRT

## 19911

&lt;213&gt; A.fumigatus

&lt;400&gt; 44069

Leu Tyr Glu Phe Leu Leu Leu Ser Leu Thr Met Tyr Asn Leu Phe Tyr  
 1 5 10 15  
 Ser Gln Pro His Asp Asn Ile Gln Gln Gln Thr Thr Gln Thr Val Asn  
 20 25 30  
 Lys Arg Asp Lys Arg Asp Lys Arg Asp Lys Thr Ser Val Thr Lys Arg  
 35 40 45  
 Asn Asn Tyr Ser Ser Trp Pro Pro Leu Ser Phe Gln Val Gly Val Asn  
 50 55 60  
 Asp  
 65

&lt;210&gt; 44070

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44070

His Arg Gly Ser Trp Thr Ser Ala Ala Ser Arg Ser Thr Thr Ser Arg  
 1 5 10 15  
 Ile Ser Thr Thr Asn Gly Thr Arg Cys Thr Lys Ser Val Val Asp Phe  
 20 25 30  
 Gly Ser Ser Gly Ser Arg Ile Ser Thr Ser Thr Gly Gly Cys Thr Pro  
 35 40 45  
 Thr Ser Asn Gly Pro Ser Ser Pro Thr Asn Ile Ile Ile Arg Lys Arg  
 50 55 60  
 Ser Leu Tyr Phe Gln  
 65

&lt;210&gt; 44071

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44071

Lys Asn Ser Cys Ser Glu Thr Ser Ile Pro Cys Ser Ile Cys Trp Asp  
 1 5 10 15  
 Leu Leu Lys Ile Met Asn Asn Gly Thr Lys Gln Arg Glu Ser Ser Lys  
 20 25 30  
 Leu His Asp Thr Pro Lys Ala Gln Glu Ser Pro Thr Ile Ala Asn Leu  
 35 40 45  
 Leu Asn Asp Gln Ala Asp Thr Glu Ala Val Gly Pro Gln Pro Pro Ala  
 50 55 60  
 Glu Val Gln Pro Val Ala Ser Val Pro Pro Met Ala Pro Val Ala Pro  
 65 70 75 80  
 Asn Leu Ser Leu Thr Ser Val Ala Pro Ala Pro Glu Ser Ala Pro Ala  
 85 90 95  
 Gln Val Ala Ala Pro Pro Leu Val Met Ala Pro Ala Ala Pro Pro Ile  
 100 105 110  
 Ser Ser Ser Gly Asn Ala Pro Tyr Ile Ser Asn Asp Lys Asn Trp Val  
 115 120 125  
 Asn Gln Phe Gly Pro Pro Thr Thr Met Leu Gln Asp Leu His Gln Val  
 130 135 140  
 Gln Ser Gln Pro Ile Tyr Leu Asn Ser Asn Phe His Gln Gln His Lys

## 19912

145 150 155 160  
Tyr Tyr Pro His Gln Ile Leu Leu Glu  
165

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<210> 44072
<211> 137
<212> PRT
<213> A.fumigatus
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|       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> | 44072 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Cys   | Gly   | Ser | Phe | Gln | Pro | Arg | Gly | Glu | Ile | Leu | Leu | Asp | Ser | Gly | Thr |  |
| 1     |       |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |  |
| Thr   | Ile   | Ser | Tyr | Phe | Thr | Pro | Asn | Ile | Ala | Arg | Ser | Ile | Ile | Tyr | Ala |  |
|       |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Leu   | Gly   | Gly | Gln | Val | His | Tyr | Asp | Ser | Ser | Gly | Asn | Glu | Ala | Tyr | Val |  |
|       |       | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Ala   | Asp   | Cys | Lys | Thr | Ser | Gly | Thr | Val | Asp | Phe | Gln | Phe | Asp | Arg | Asn |  |
|       | 50    |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |  |
| Leu   | Lys   | Ile | Ser | Val | Pro | Ala | Ser | Glu | Phe | Leu | Tyr | Gln | Leu | Tyr | Tyr |  |
| 65    |       |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |  |
| Thr   | Asn   | Gly | Glu | Pro | Tyr | Pro | Lys | Cys | Glu | Ile | Arg | Val | Arg | Glu | Ser |  |
|       |       |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Glu   | Asp   | Asn | Ile | Leu | Gly | Asp | Asn | Phe | Met | Arg | Ser | Ala | Tyr | Ile | Val |  |
|       |       |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Tyr   | Asp   | Leu | Asp | Asp | Arg | Lys | Ile | Ser | Met | Ala | Gln | Val | Lys | Tyr | Thr |  |
|       |       | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Ser   | Gln   | Ser | Asn | Ile | Val | Ala | Ile | Asn |     |     |     |     |     |     |     |  |
|       | 130   |     |     |     |     | 135 |     |     |     |     |     |     |     |     |     |  |

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<210> 44073
<211> 268
<212> PRT
<213> A.fumigatus
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|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 44073 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ile         | Gly | Ile | Ser | Thr | Pro | Val | Val | Asn | Thr | Leu | Ile | Val | Asp | Ser | Ile |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro         | Ile | Thr | Val | Val | Thr | Ser | Asp | Gln | His | Gly | His | Gly | His | Gly | Gln |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu         | His | Glu | His | Glu | His | Glu | His | Ala | Asp | Val | Asp | Ile | Ser | His | Ile |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro         | Asp | Asp | Tyr | Asp | Leu | Ser | Gln | Gly | Gly | Ile | Ile | Arg | Ile | Val | Lys |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile         | Gly | Glu | Leu | Asp | Ala | Asn | Pro | Cys | Arg | Gly | Thr | His | Leu | Thr | Ser |
| 65          |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |
| Thr         | Ala | Gln | Ile | Gln | Ser | Ile | Ala | Leu | Leu | His | Gln | Ser | Pro | Ile | Arg |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly         | Gly | His | Ser | Arg | Leu | Tyr | Phe | Ile | Cys | Gly | Gly | Arg | Val | Ala | Asn |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| His         | Leu | Arg | Lys | Glu | His | Glu | Ile | Leu | Lys | Asn | Val | Ser | Thr | Asn | Gln |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu         | Ser | Cys | Ser | Ile | Asp | Ala | Val | Glu | Glu | Lys | Ile | Glu | Leu | Leu | Ser |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu         | Asn | Asp | Lys | Lys | Thr | Asn | Ser | Thr | Leu | Asn | Asn | Leu | Leu | Lys | Glu |
| 145         |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu         | Ala | Ser | Ile | Glu | Ala | Asn | Lys | Ile | Phe | Gln | Asn | Phe | Asn | Thr | His |



## 19913

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |
| Asp | Asn | Asn | Asn | Ser | Lys | Leu | Ala | Tyr | Val | Tyr | Arg | Ala | Asp | Leu | Pro |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |
| Glu | Tyr | Leu | Thr | Trp | Val | His | Lys | Glu | Leu | Thr | Thr | Leu | Ile | Asn | Gln |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |
| Asp | Lys | Thr | Gly | Asp | Val | Asp | Val | Ser | Asn | Lys | Gln | Thr | Leu | Val | Leu |  |
|     | 210 |     |     |     |     | 215 |     |     |     | 220 |     |     |     |     |     |  |
| Leu | Ser | Gly | Ala | Ala | Pro | Asn | Gly | Gly | Asn | Ile | Ile | Ile | Ser | Gly | Pro |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |
| Asn | Ala | Glu | Glu | Leu | Arg | Val | Glu | Cys | Thr | Ser | Lys | Leu | Ser | Asn | Phe |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |
| Asn | Thr | Trp | Cys | Val | Lys | Asp | Leu | His | Phe | Gln | Arg |     |     |     |     |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     |     |     |     |  |

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<210> 44074
<211> 274
<212> PRT
<213> A.fumigatus
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<400> 44074

[illegible]

<210> 44075  
 <211> 68  
 <212> PRT  
 <213> A.fumigatus

<400> 44075  
 Val Phe Ser Ile Asn Leu Gly Phe Val Gly Tyr Tyr Phe Leu Thr Phe  
 1 5 10 15  
 Phe Ser Asn Lys Ser Ser Phe Asp Cys Ile Phe Val Val Thr Ile Asn  
 20 25 30  
 Ile Ser Phe Phe Gln Phe Phe Tyr Asn Phe Ser Gly Ser Phe Thr Glu  
 35 40 45  
 Asn Ser Ile Asp Gln Arg Leu Asp Met Ser Gln Thr Thr Phe Thr Thr  
 50 55 60  
 Val Leu Val Asn  
 65

<210> 44076  
 <211> 97  
 <212> PRT  
 <213> A.fumigatus

<400> 44076  
 Leu Ser Thr Ser Val Ser Ser Asn Ser Ser Thr Ile Phe Leu Glu Ala  
 1 5 10 15  
 Leu Leu Lys Ile Leu Leu Ile Lys Asp Leu Ile Cys Leu Lys Pro Leu  
 20 25 30  
 Ser Arg Gln Tyr Leu Ser Ile Asn Leu Glu Ile Val Ser Ser Gly Ile  
 35 40 45  
 Thr Thr Arg Pro Ser Ser Asn Pro Thr Phe Phe Ala Ala Gly Ile  
 50 55 60  
 Lys Cys Leu Phe Val Ile Ser Ile Leu Ser Phe Phe Val Tyr Pro Leu  
 65 70 75 80  
 Thr Ser Ile Ile Ser Ile Arg Ser Leu Ser Gly Pro Gly Met Glu Pro  
 85 90 95  
 Arg

<210> 44077  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 44077  
 Thr Val Ser Glu Leu Ser Ile Ala Gly Pro Ser Leu Cys Val Gly Ala  
 1 5 10 15  
 Ala Pro Pro Asn Pro Ala Pro Trp Pro Asn Asn Leu Cys Asn Leu Thr  
 20 25 30  
 Ile Val Val Trp Gln Lys Lys Lys Tyr Leu Tyr Tyr Ala Asn Ser Ser Pro Met  
 35 40 45  
 Ser Pro Thr Lys Lys Lys Tyr Leu Tyr Tyr Ala Asn Ser Ser Pro Met  
 50 55 60  
 Thr Thr Pro Leu Thr Ser Pro Ala Arg Thr His Ala Arg Lys Val Tyr  
 65 70 75 80  
 Ser His Ile Lys Ala Pro Phe Phe Ile Ser Gly Asp Asp Leu Val Leu

## 19915

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|--|--|
|     |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     |     | 95 |  |  |
| Tyr | Lys | Tyr | Cys | Asp | Gln | Thr | Lys | Pro | Phe | Arg | Arg | Asn | Arg | Tyr | Phe |    |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |    |  |  |
| Phe |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |  |  |

&lt;210&gt; 44078

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44078

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| Tyr | Lys | Tyr | Phe | Phe | Phe | Val | Gly | Glu | Phe | Phe | Phe | Ser | Arg | Gln | Val |  |  |  |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     |     | 15  |     |  |  |  |
| Ile | Phe | Phe | Phe | Cys | His | Thr | Thr | Met | Val | Arg | Leu | Gln | Arg | Leu | Leu |  |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |  |
| Gly | Gln | Gly | Ala | Gly | Leu | Gly | Gly | Ala | Ala | Pro | Thr | Gln | Ser | Asp | Gly |  |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |  |
| Pro | Ala | Ile | Asp | Asn | Ser | Glu | Thr | Val | Tyr | Ile | Ser | Ser | Leu | Ala | Leu |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |
| Leu | Lys | Met | Leu | Lys | His | Gly | Arg | Ala | Gly | Val | Pro | Met | Glu | Val | Met |  |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |  |
| Gly | Leu | Met | Leu | Gly | Glu | Phe | Val | Asp | Asp | Phe | Thr | Ile | His | Val | His |  |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |  |
| Asp | Val | Phe | Ala | Met | Pro | Gln | Ser | Gly | Thr | Gly | Val | Ser | Val | Glu | Ala |  |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |  |
| Val | Asp | Asp | Val | Phe | Gln | Thr | Lys | Met | Met | Asp | Met | Leu | Arg | Gln | Thr |  |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |  |
| Gly | Arg | Asp | Gln | Met | Val | Val | Gly | Trp | Tyr | His | Ser | His | Pro | Gly | Phe |  |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |  |
| Gly | Leu | His | His | Gly | Pro | Gly | Arg | Thr | Arg | Ala |     |     |     |     |     |  |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     |  |  |  |

&lt;210&gt; 44079

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44079

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| Lys | Lys | Ile | Phe | Pro | Ile | Leu | Lys | Ile | Gly | Ile | Gly | Asn | Leu | Leu | Ile |  |  |  |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |  |
| Phe | Ile | Phe | Leu | Ile | Thr | Asn | Asn | Trp | Arg | Thr | Ala | His | Cys | His | Cys |  |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |  |
| Phe | Leu | Gln | Ser | Thr | Phe | Lys | Thr | Ile | Trp | Ile | Ile | Asn | Ile | Ile | Ile |  |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |  |
| Lys | Leu | Arg | Val | Ile | Thr | Thr | Thr | Asp | Phe | Val | Tyr | Val | Ile | Ala | Gly |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |
| Lys | Asn | Ser | Trp | Gly | Phe | Ile | Ile | Ala | Ala | Leu |     |     |     |     |     |  |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     |  |  |  |

&lt;210&gt; 44080

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44080

## 19916

Phe Phe Gln Gln Phe Phe Cys Asn Ile Cys Thr Tyr Phe Leu Thr Asn  
 1 5 10 15  
 Gln Arg Asp Asn Val Tyr Ser Lys Thr Lys Lys Tyr Gly Ile Leu Gly  
 20 25 30  
 Ala Thr Ser Asp Phe Phe Pro Ile Glu Ile Phe Val Asp Val Tyr Ile  
 35 40 45  
 Thr Ile Tyr Ser Gln Gly Met Asn Thr Ala Ala Phe Phe Asn Cys Lys  
 50 55 60  
 His Phe Thr Arg Ser Leu Ala Gly Phe Val Leu Ile Val Gln Phe Asn  
 65 70 75 80  
 Val Val

&lt;210&gt; 44081

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44081

Ser Cys Glu Met Phe Thr Ile Glu Glu Cys Ser Cys Ile His Thr Leu  
 1 5 10 15  
 Ala Val Tyr Arg Tyr Ile Asn Ile His Lys Asn Phe Tyr Arg Glu Lys  
 20 25 30  
 Ile Arg Gly Ser Pro Gln Asn Ala Ile Leu Leu Cys Leu Arg Ile Asp  
 35 40 45  
 Ile Ile Pro Leu Val Gly Gln Lys Ile Gly Ala Tyr Val Ala Glu Glu  
 50 55 60  
 Leu Leu Glu Glu Leu Asp Glu Glu Gly Glu Leu Glu Thr Ser Val Ser  
 65 70 75 80  
 Glu Ile Met Asn Gln Leu Ala Ala Ser Asn Glu Ser Leu Glu Gly Cys  
 85 90 95  
 Leu Pro Ile Ser Ser Leu Leu Ser Leu Ala Ile Ala Ile Ile Asp Glu  
 100 105 110  
 Ala Ser Glu Ser Ser Asn Asp Glu Ala Pro Thr Ile Leu Thr Ser Asn  
 115 120 125  
 His Ile Asp Glu Ile Gly Ser Ser Tyr Asp Pro Gln Phe Asp Asp Tyr  
 130 135 140  
 Val Asn Asp Pro Asp Gly Phe Glu Ser Arg Leu Gln Glu Ala Met Ala  
 145 150 155 160  
 Met Ser Ser Ser Pro Ile Ile Ser Asp Glu Glu Asn Glu Asn Gln Glu  
 165 170 175  
 Ile Ser Asn Ser Asn Phe Gln Asn Gly Glu Asn Phe Phe Ser Arg Glu  
 180 185 190  
 Glu Gly Arg Ser Ile Glu Leu Leu Pro Ser Leu Pro Pro Pro Ser His  
 195 200 205  
 Asn Thr Ser Val Ser Thr Ser Arg Asp Thr Ser Ser Thr Thr Gly Ala  
 210 215 220  
 Gly Arg Asn Arg Thr Cys  
 225 230

&lt;210&gt; 44082

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44082

## 19917

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Asn Ser Leu Lys Arg Ala Thr Leu Asn Phe Ile Ser Thr Ile Val Met
1          5          10          15
Asn His Leu Ser Ser Val Leu Ile Thr Glu Ser Asn Lys Gln Glu Leu
20          25          30
Pro Glu Ile Ile Gly Lys Val Phe Glu Tyr Ser Tyr Asp Leu Ser Asp
35          40          45
Thr Thr Thr Ser Lys Leu Ala Ile Val Gln Leu Thr Asn Phe Val Asn
50          55          60
Val Phe Gly Gly Ser Gly Gly Lys Leu Asp Asp Lys Glu Asp Lys Tyr
65          70          75          80
Ser Glu Asn Leu Pro Pro Ile Glu Gly Ile Asp Glu Phe Leu Ile Asn
85          90          95
Lys Val Ile Asn Leu Ser Phe Glu Leu Pro Phe Gln Lys Gln Glu Ser
100         105         110
Asn Leu Asn Asp Ala Gln Tyr Arg Leu Ile Ala Gln Glu Ile Ala Ile
115         120         125
Leu Leu Lys Ser Phe Glu Leu Lys Lys His Asp Glu Phe Ile Val Val
130         135         140
Leu Ser Asn Tyr Leu Leu Asn Met Gly Leu Ser Gln Asp Val Cys Asn
145         150         155         160
Asp Phe Cys Leu Asn Leu His Asn Leu Asp Leu Lys Asp Phe Lys Lys
165         170         175
Tyr Phe Ile Ser Val Ile Asn Lys Met Lys Ser Gly Lys
180         185

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&lt;210&gt; 44083

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44083

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Ile Ala Gln Ile Arg Arg Pro Ser Ser Leu Ser Val Lys Ala Pro Met
1          5          10          15
Arg Leu Pro Lys Ser Ile Leu Thr Leu Ile Arg Leu Asp Lys Arg Ser
20          25          30
Asp Ile Gln Ala Pro Val Leu Asn Ile Asn Leu Lys Asn Asp Arg Leu
35          40          45
Leu Thr Pro Gly Tyr Leu Phe Leu Thr Pro Tyr Gly Val Asp Leu Pro
50          55          60
Gly Pro Tyr Ile Phe Asp Ile Ser Gly Ser Ser Pro Arg Gly Trp Lys
65          70          75          80
Tyr Lys Arg Ala

```

&lt;210&gt; 44084

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44084

```

Val Pro Asn Gly Glu Lys Thr Ile Thr Lys Arg Lys Val Arg Leu Val
1          5          10          15
Gly Gly Lys Ala Val Asn Leu Phe Leu Glu Asp Pro Val Pro Thr Glu
20          25          30
Leu Arg Lys Val Leu Thr Arg Thr Glu Ser Pro Phe Gly Glu Phe Thr
35          40          45

```

## 19918

```

Asn Met Thr Tyr Thr Ala Cys Thr Trp Gln Pro Asp Thr Phe Ser Ala
 50                      55                      60
Glu Gly Phe Thr Leu Arg Ala Ala Lys Tyr Gly Arg Glu Thr Glu Ile
65                      70                      75                      80
Val Ile Cys Ile Thr Met Tyr Asn Glu Asp Glu Val Ala Phe Ala Arg
                      85                      90                      95
Thr Met His Gly Val Met Lys His Ile Ala His Leu Cys Ser Arg His
                      100                    105                    110
Lys Ser Lys Ile Trp Gly Lys Asp Ser Trp Lys Lys Val Gln Val Ile
                      115                    120                    125
Ile Val Ala Asp Gly Arg Asn Lys Val Gln Gln Ser Val Leu Glu Leu
                      130                    135                    140
Leu Thr Ala Thr Gly Cys Tyr Gln Glu Asn Leu Ala Arg Pro Tyr Val
145                      150                      155                      160
Asn Asn Ser Lys Val Asn Ala His Leu Phe Glu Tyr Thr Thr Gln Ile
                      165                      170                      175
Ser Ile Asp Glu Asn Leu Lys Phe Lys Gly Asp Glu Lys Asn Leu Ala
                      180                      185                      190
Pro Val Gln Val Leu Phe Cys Leu Lys Glu Leu Asn Gln Lys Lys Ile
                      195                      200                      205
Asn Ser His Arg Trp Leu Phe Asn Ala Phe Cys Pro Val Leu Asp Pro
210                      215                      220
Asn Val Ile Val Leu Leu Asp Val Gly Thr Lys Pro Asp Asn His Ala
225                      230                      235                      240
Ile Tyr Asn Leu Trp Lys Ala Phe Asp Arg Asp Ser Asn Val Ala Gly
                      245                      250                      255
Ala Ala Gly Glu Ile Lys Ala Met Lys Gly Lys Gly Trp Met Phe His
                      260                      265                      270
His Gly Ala Gly Arg Ile Arg Asp
                      275                      280

```

&lt;210&gt; 44085

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (267)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44085

```

Arg Ser Lys Thr Val Lys Leu Ser Pro Leu Asp Asn Ala Val Arg Thr
1                      5                      10                      15
Ile Ala Ala Lys Asn Asp Asp Leu Ile Gln Leu Glu Ala Phe Ile Asn
                      20                      25                      30
Ala Ala Leu Lys Glu Lys Thr Asp Tyr Ser His Tyr Phe Asn Asp Leu
35                      40                      45
Ser Arg Gln Leu Ala Gly Thr Val Asp Ser Pro Val Asn Gly Gly Val
50                      55                      60
Gly Gln Tyr Arg Ala Phe Phe Ser Asp Ser Lys Tyr Gln Ile Asn Glu
65                      70                      75                      80
Glu Ser Ile Ala Lys Thr Glu Leu Leu Arg Asn Ala Phe Asn Asp Leu
                      85                      90                      95
Ala Ile Ile Leu Tyr Arg Cys Leu Asn Leu His Gly Ser Leu Ile Gly
100                    105                    110

```

## 19919

Leu Ser Met Lys Leu Ser His Gln Ala Leu Val Glu Leu Phe Arg Lys  
 115 120 125  
 Asn Phe Gln Glu Glu Ile Val Ala Leu Arg Leu Gly Glu Glu Ala Thr  
 130 135 140  
 Ile Thr Ala Pro Ser Ser Ser Arg Val Ser Ile Phe His Asn Lys Arg  
 145 150 155 160  
 Ala Asn Gly Leu Met Thr Glu Arg Ala Asn Ser Ile Ser Asn Met Ser  
 165 170 175  
 Gly Ala Gly Ser Thr Tyr Ser Gly Ser Arg Leu Ala Arg Ser Pro Thr  
 180 185 190  
 Asn Ala Ser Ser Val Ser Ser Asn Asn Ser Ser Ile Thr Arg Ser Gly  
 195 200 205  
 Arg Ala Ser Asn Thr Ser Gly Tyr Pro Ala Ser Val Ile Gln Pro Gly  
 210 215 220  
 Tyr Thr Gly Leu Lys Gly Ser Ser Leu Lys Asn Gly Asn Gly Ser Val  
 225 230 235 240  
 Thr Ser Lys Ser Ile Asn Gly Ser Gly Lys Thr Asn Ala Ile Asn Thr  
 245 250 255  
 Lys Trp Leu Tyr Glu Val Phe Ser Leu Ser Xaa Ile Ile  
 260 265

&lt;210&gt; 44086

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (40)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44086

Ile Leu Ile Leu Lys Ser Gln Lys Phe Leu Asn Ser Asp Tyr Thr Ile  
 1 5 10 15  
 Asp Val Leu Leu Asn Arg Leu Lys Glu Ser Leu Asn Thr Gly Glu Glu  
 20 25 30  
 Phe Ser Lys Phe Ile Lys Lys Xaa Ala Gln Ile Glu Asp Asp His Tyr  
 35 40 45  
 Asn Gln Leu Lys Lys Phe Ala Gly His Val Arg Thr Asn Met Lys Asn  
 50 55 60  
 Asn Ser Arg Asn Leu Lys Asn Asp Ser Leu Gln Phe Gln Met Asp Gln  
 65 70 75 80  
 Ile Ile Gln Phe Asp Glu Ser Leu Tyr Gly Val Gly Asn Ser Tyr Val  
 85 90 95  
 Val Ala Leu Asn Thr Met Tyr Asp Glu Leu Thr Ser Leu Ile Gly Thr  
 100 105 110  
 Ile Gly Arg Thr Arg Lys Leu Ile Lys Asp Glu His Lys Arg Lys Glu  
 115 120 125  
 Lys Asp Cys Ile Asp Ala Ile Ile Thr Ala Glu Lys Ala Lys Thr Lys  
 130 135 140  
 Tyr Asn His Leu Cys Glu Asp Leu Asp Arg Leu Lys Thr Ser Asp Pro  
 145 150 155 160  
 Asn Lys Lys Ser Phe Ser Leu Lys Asn Lys Ser Val Glu Gln Gln Glu  
 165 170 175  
 Asp Glu Leu Ser Arg Lys Val Asp Thr Ala Asp Gln Glu Tyr Lys Leu  
 180 185 190

## 19920

Lys Val Ala Thr Cys Lys Lys Leu Lys Asp Glu Ile Leu Val Ile His  
 195 200 205  
 Arg Pro Asn Asn Thr Lys Lys Leu Lys Asn Leu Ile Leu Glu Met Asp  
 210 215 220  
 Ile Ala Leu Asn Leu Gln Leu Gln Lys Tyr Ala Thr Trp Asn Glu Asn  
 225 230 235 240  
 Leu Ile Met Asn Ser Gly Val Leu Ile Asn Pro Leu Gln Ser Ser Lys  
 245 250 255  
 Ala Ser Met Lys Ser Met Ala Ser Asp Leu His His Gly Ala Gly Arg  
 260 265 270  
 Ile Arg Thr  
 275

&lt;210&gt; 44087

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44087

His His Ala Trp Arg Lys Asn Ser Gly Asn Gly Leu Glu Leu Ala Asn  
 1 5 10 15  
 His Ala Ala Val Pro Thr Leu Thr Thr Pro Ser Asn Asn His Asn Leu  
 20 25 30  
 Ser Asn Gly Ser Asp Glu Gln Met Gln Asp Trp Gly Ser Gly Thr Arg  
 35 40 45  
 Thr Arg Ile Cys Pro Ile Ala Gly Gln Glu Val Leu Gln Pro Asn Ala  
 50 55 60  
 Lys Leu Ser Leu Gly Lys Gln Asp Ser Gly Asn Thr Met Arg Ala Ala  
 65 70 75 80  
 Leu Ala Leu Leu Ala Arg Ala Ala Glu Gln Cys Glu Ser Leu Phe Asn  
 85 90 95  
 Gly Met Glu His Glu Arg Ala Met Leu Leu Gln Ser Asp Asp Lys Lys  
 100 105 110  
 Ala Arg Leu Ser Trp Glu Val Cys Ser Ile Val  
 115 120

&lt;210&gt; 44088

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44088

Arg Gln Lys Ser Asp Lys Leu Lys Gly Ser Val Thr Trp His Arg Leu  
 1 5 10 15  
 Gly Glu Leu Ala Thr Cys Ile Phe Glu Leu Gly Leu His Gln Asp Ser  
 20 25 30  
 Asp Glu Arg Ile Asp Leu Pro Asp Phe Leu Leu Glu Ser Arg Arg Arg  
 35 40 45  
 Leu Phe Ala Ala Val Tyr Gln Leu Asp Lys Ser Ile Val Thr Phe Leu  
 50 55 60  
 Gly Arg Pro Pro Arg Ile Ser Arg Arg His Ser Asn Cys Arg Leu Pro  
 65 70 75 80  
 Leu Asp Ile Ser Asp Glu Ala Leu Thr Gly Ser Arg Glu Leu Ala Gln  
 85 90 95  
 Arg Ser Val Thr Ala Glu Gly Trp Ser Cys His Ala Val Tyr Gln Arg  
 100 105 110



# 19921

Ser Ala Trp Ile Arg Val Arg Phe Leu Ile Ser Thr Phe Arg Glu Glu  
 115 120 125  
 Ile Leu Glu Leu Ser Leu Thr Lys Pro Ser Glu Asn Arg Glu Glu Gln  
 130 135 140  
 Leu Arg  
 145

<210> 44089

<211> 176

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (136)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44089

Pro Pro Tyr Pro Cys His Pro Pro Thr Ala Ile Leu Ser Ser Val Leu  
 1 5 10 15  
 Asp Ala Thr Pro Cys Arg Trp Glu Gly Glu Ile Ala Ala Leu Leu Trp  
 20 25 30  
 Ser Gln Ser Val Gly Ser Pro Leu Gln Ile Leu Ala Ser Ile Asn Pro  
 35 40 45  
 Ala Gln Thr Cys Ile Gln His Ser Cys Gln Asp Asn Leu Ser Ala Ala  
 50 55 60  
 Arg Pro Ala His Ser Leu Ala Leu Pro Gln Asn Leu Ser Gln Ile Asp  
 65 70 75 80  
 Arg Val Leu His Thr Pro Phe Asp Lys Thr Thr Thr Val Arg Thr Leu  
 85 90 95  
 Leu Leu Asn Thr Ala Ser Gln Arg Lys Ile Glu Asp Phe Asn Lys Lys  
 100 105 110  
 Thr Trp Gly Trp Asn Gly Cys Ser Asn Val Trp Val Gly Thr Val Ile  
 115 120 125  
 Tyr Leu Ser Ser Gly Ser Pro Xaa Met Pro Asn Pro Val Ala Asn Ala  
 130 135 140  
 Val Cys Gly Pro Gln Val Pro Gly Thr Glu Ala Pro Asp Asp Thr Thr  
 145 150 155 160  
 Asp Ile Ala Gly Leu Asn Pro Cys Leu Leu Asn Ala Cys Cys Asn Ile  
 165 170 175

<210> 44090

<211> 176

<212> PRT

<213> A.fumigatus

<400> 44090

Phe Ser Asn Gly Arg Met Ser Phe Phe Trp Lys Arg Glu Asn Pro Leu  
 1 5 10 15  
 Thr Gly Pro Ala Val Leu Thr Thr His Val Leu Lys Ile Trp Ser Asn  
 20 25 30  
 Ala Ile Tyr Leu Lys Ile Phe Arg Trp Arg Ser Thr Val Ala Ala Val  
 35 40 45  
 Pro Met Ser Ser Ser His Ser Tyr Ile Val Val Arg Ala Gly Cys Asn  
 50 55 60  
 Thr Val Gln Val Gly Gly Gly Asp Ser Cys Ser Ala Leu Val Thr Lys

# 19922

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Cys | Gly | Ile | Ser | Ala | Ala | Asp | Phe | Ser | Lys | Tyr | Lys | Pro | Gly | Pro | Asn |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Tyr | Ser | Thr | Leu | Val | Pro | Gly | Gln | Pro | Val | Cys | Cys | Ser | Ala | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Leu | Leu | Gly | Phe | Ala | Pro | Lys | Pro | Lys | Pro | Asp | Arg | Ser | Cys | Ala |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Thr | Tyr | Thr | Ile | Arg | Gln | Asp | Asp | Asn | Cys | Ala | Asn | Leu | Ala | Ala | Gln |
|     |     |     | 130 |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr | Ser | Leu | Thr | Lys | Glu | Asp | Arg | Gly | Leu | Gln | Gln | Glu | Asp | Met | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Glu | Trp | Leu | Leu | Lys | Cys | Leu | Gly | Arg | Asp | Ser | Asn | Leu | Phe | Lys |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |

<210> 44091

<211> 65

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (39)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44091

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Pro | Gly | Arg | Ala | Arg | Lys | Ile | Asn | Ser | Leu | Trp | Pro | Ile | Asn | Pro |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Leu | Ser | His | Ser | Pro | Gln | Ser | Thr | Ala | Leu | Ser | His | Tyr | Gln | Lys | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Pro | Met | Gly | Ala | Arg | Xaa | Arg | Thr | Pro | Thr | Pro | Lys | Asn | Arg | Ile |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Glu | Gly | Arg | Ile | Phe | Phe | Asp | Val | Leu | Cys | Ala | Leu | Phe | Pro | Thr | Cys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 44092

<211> 185

<212> PRT

<213> A.fumigatus

<400> 44092

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Ser | Tyr | Phe | Gln | Ser | Arg | Arg | Val | Asp | Asn | Tyr | Tyr | Met | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Pro | Asp | Ser | Glu | His | Ser | Phe | Ser | Arg | His | Ser | Arg | Pro | Cys | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Ile | Val | Gln | Phe | Ser | Tyr | Asn | Ser | Leu | Leu | Pro | His | Ser | Val | Arg |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Leu | Lys | Val | Val | Ser | Cys | Ile | Arg | Met | Met | Ala | Ser | Glu | Lys | Ala | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asp | Ala | Ile | Gly | Pro | Ala | Ala | Glu | Tyr | Asp | Pro | Arg | Arg | Asp | Ser | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Ala | Ser | Ala | Ala | Lys | Val | Val | His | Asn | Ala | Arg | Ala | Ala | Thr | Glu | Lys |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Glu | Gln | Arg | Met | Ser | Leu | Trp | Glu | Gly | Ile | Lys | Thr | Tyr | Pro | Lys | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

## 19923

Val Gly Trp Ser Leu Leu Ile Ser Thr Cys Ile Ala Met Glu Gly Tyr  
           115                          120                          125  
 Asp Ile Cys Leu Val Asn Asn Phe Tyr Ala Phe Pro Gln Phe Asn Arg  
           130                          135                          140  
 Lys Tyr Gly Glu Leu Thr Ser Lys Gly Asp Tyr Gln Val Pro Ala Arg  
           145                          150                          155                          160  
 Val Ser Ser Pro Pro Thr Tyr Pro Pro Phe Cys Asp Met Cys Ala Glu  
                           165                          170                          175  
 Met Ala Leu Tyr Ser Gly Lys Gln Ala  
                           180                          185

&lt;210&gt; 44093

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2), (31), (33), (36), (38), (44), (47), (58)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44093

Gly Xaa Gln Gly Ser Tyr Arg Met Ala Ser Asp Pro Gly Pro Ala Arg  
   1                          5                          10                          15  
 Leu Val Ser Ala Tyr Gly Glu Ser Asp Ile Thr Tyr Arg Gly Xaa Gly  
           20                          25                          30  
 Xaa Gly Val Xaa Pro Xaa Asp Tyr Ser Ala His Xaa Ala Tyr Xaa Ile  
           35                          40                          45  
 Cys Trp Leu Trp Gly Arg Ile Tyr Pro Xaa Trp Ser Tyr Thr Gln Tyr  
           50                          55                          60  
 Phe Asn Val Arg Pro Tyr Gly Leu Val  
   65                          70

&lt;210&gt; 44094

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44094

Ile Val Asp Ile Cys Gly Ala Leu Cys Arg Phe Val Val Lys Met Lys  
   1                          5                          10                          15  
 Glu Ser Pro Thr Leu Cys Cys Leu Lys Ala Gln Trp Trp Leu Glu Phe  
           20                          25                          30  
 Thr Ser Pro Ala Thr Asp His Ile Asn Thr Gly Ala Leu Val Gly Val  
           35                          40                          45  
 Arg Ser Leu Gln Ala Ser Arg Ile Ile Gly Gly Cys Gly Gly Pro Leu  
           50                          55                          60  
 Gly  
   65

&lt;210&gt; 44095

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44095

## 19924

Pro Thr Pro Pro Ile Thr Pro Glu Asn Glu Ala Phe Ala Asn Ala Gly  
 1 5 10 15  
 Asn Pro Asn Phe Val Lys Glu Gly Pro Glu Thr Asn Thr Cys Ser Pro  
 20 25 30  
 Ser Pro Ser Pro Pro Pro Met Gln Tyr Val Asp Ser His Ala Tyr Asn  
 35 40 45  
 Pro Glu Ala Ala Tyr Ala His Gln Pro Tyr Glu Gln Pro Gln Met Ser  
 50 55 60  
 Phe Thr Ser Ser Phe  
 65

<210> 44096  
 <211> 253  
 <212> PRT  
 <213> A.fumigatus

<400> 44096  
 Arg Arg Thr Cys Asp Asp Ser Phe Met Asp Pro His Ala Asn Ala Val  
 1 5 10 15  
 Thr Ser Asp Phe Ile Arg Gln Lys Ile Arg Ser Ile Val Arg Asp Gly  
 20 25 30  
 Asp Thr Ala Glu Val Leu Cys Pro Thr Tyr Pro Phe Gly Ala Arg Arg  
 35 40 45  
 Pro Pro Cys Ala Asp Gly Tyr Tyr Glu Thr Phe Asn Arg Ser Asn Val  
 50 55 60  
 Lys Leu Val Asp Ile Arg Glu Asp Glu Ile Glu Val Tyr Asp Gln Gly  
 65 70 75 80  
 Ile Lys Thr Ala Ser Gly Ala Glu Tyr Glu Leu Asp Met Ile Ile Leu  
 85 90 95  
 Ala Leu Gly Phe Asp Thr Gly Thr Gly Ala Met Asn Lys Ile Asp Ile  
 100 105 110  
 Arg Gly Ser Gln Asn Arg Ser Leu Arg Glu Ser Trp Thr Arg Arg Leu  
 115 120 125  
 Glu Thr Phe Ala Gly Val Leu Val His Gly Tyr Pro Asn Met Phe Val  
 130 135 140  
 Val Cys Gly Pro His Leu Pro Ala Gly Asn Gln Pro Val Ser Leu Glu  
 145 150 155 160  
 Ala Phe Ala Ser Trp Ile Gly Lys Thr Ile Glu His Met Glu Thr Asn  
 165 170 175  
 Gly Leu Ala Ser Ile Asp Val Ser Asn Glu Ala Met Asp Ala Trp Thr  
 180 185 190  
 Thr His Val Glu Gln Val Trp Gly Gly Ser Phe Leu Ala Lys His Ala  
 195 200 205  
 His Glu Gln Gly Ser Trp Phe Val Gly Thr Asn Ile Ser Pro Gly Asp  
 210 215 220  
 Thr Ala Asn His Val Leu Phe Gly Gly Met Ala Thr Trp Asn Pro Gly  
 225 230 235 240  
 Phe His Pro Gly Thr Leu Glu Thr Gly Arg Val Lys Leu  
 245 250

<210> 44097  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 44097

## 19925

Leu Asn Ser Val Gly Leu Ser Lys Asn Leu Leu Arg Ala Leu Ser Ala  
 1 5 10 15  
 Ser Ser Ala Asp Leu Pro Glu Leu Glu Ala Phe Pro Lys Ser His Ile  
 20 25 30  
 Val Thr Phe Lys Tyr Tyr Val Gly Val Ile His Phe Leu Asp Glu Asn  
 35 40 45  
 Tyr Arg Glu Val Arg Arg Ser Arg Ala Asn Leu Arg  
 50 55 60

&lt;210&gt; 44098

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44098

Gly Leu Thr Asp His Ala Cys Arg Cys Phe Asn Gly Ala Arg Asp Phe  
 1 5 10 15  
 Gly Ala Arg Leu Val Ala Leu Met Ala Gly Trp Gly Gly Glu Val Phe  
 20 25 30  
 Arg Glu Lys His Val Trp Trp Ile Trp Gly Pro Trp Ala Ala Asp Ile  
 35 40 45  
 Thr Gly Gly Leu Phe Gly Thr Phe Ile Tyr Asp Leu Ala Ile Phe Thr  
 50 55 60  
 Glu Ala Glu Gly Pro Ile Asn Tyr Pro Arg Arg Arg Arg Lys Arg Ala  
 65 70 75 80  
 Leu Leu Ile Lys Glu Lys Asn Gln Met Val Lys Leu Arg Cys Lys Arg  
 85 90 95  
 Arg Lys Ile Arg Asp Val Glu Arg Ala Val Arg Glu Val Glu Gln  
 100 105 110

&lt;210&gt; 44099

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44099

Gly Arg Gly Arg Arg Asn Asn Leu Ala Arg Ser Ala Ile Ile Ile Leu  
 1 5 10 15  
 Pro Ser Val Ala Ile Gly Ala Leu Tyr Gly Arg Ala Phe Gly Thr Met  
 20 25 30  
 Phe Lys Met Trp Gln Asn Ala Tyr Pro Asn Phe Phe Phe Phe Asn Ser  
 35 40 45  
 Cys Glu Pro Asp Val Pro Cys Val Thr Pro Gly Ile Tyr Ala Ile Val  
 50 55 60  
 Gly Ala Ala Ser Ala Leu Gly Gly Ala Thr Arg Met Thr Val Ser Ile  
 65 70 75 80  
 Val Val Ile Met Phe Glu Leu Thr Gly Ala Leu Thr Tyr Val Ile Pro  
 85 90 95  
 Ile Met Ile Ala Val Met Leu Ser Lys Trp Cys Gly Asp Ile Phe Gly  
 100 105 110  
 Lys Arg Gly Ile Tyr Glu Ser Trp Ile His Leu Lys Glu Tyr Pro Phe  
 115 120 125  
 Leu Asp His Arg Asp Asp Thr Thr Ser Pro Asp Leu Pro Ala His Arg  
 130 135 140  
 Val Met Thr Arg Val Glu Asp Leu Thr Val Ile Val Ala Asn Gly His  
 145 150 155 160

## 19926

Thr Ile Asp Ser Leu Arg Asn Leu Leu Leu Ala Thr Ser Tyr Arg Gly  
165 170 175

```
<210> 44100
<211> 75
<212> PRT
<213> A.fumigatus
```

```

<400> 44100
Ser Glu Gln Arg Ala Trp Ser Ala Leu Ser Leu Ile His Arg Arg Met
1          5          10          15
Tyr Pro Glu Ile Leu Leu Asn Pro Ile Thr Gln Ser Ser Leu Thr Ile
          20          25          30
Leu Asn Ser Ser Gly Arg Tyr Ile Leu Ile Lys Leu Trp Asn Pro Arg
          35          40          45
Asn Asp Gly Asn Ile Asp Ile Arg Ser Ile Ile Thr Tyr Gly Phe Ala
          50          55          60
Gly Pro Arg Phe Phe Pro Ala Gly Glu Phe Arg
65          70          75

```

```
<210> 44101
<211> 197
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (3)
<223> Identity of amino acid sequences at the above locations are unknown.
```

[illegible]

195

&lt;210&gt; 44102

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44102

```

Met Ser Asp Pro Asn Ile Val Arg Leu Leu Asn Ile Val His Ala Asp
1           5           10           15
Gly His Lys Leu Tyr Leu Val Phe Glu Phe Leu Asp Leu Asp Leu Lys
          20           25           30
Lys Tyr Met Glu Ala Leu Pro Val Ser Glu Gly Gly Arg Gly Lys Ala
          35           40           45
Leu Pro Glu Gly Ser Ala Leu Ser Lys Asn Met Gly Leu Gly Asp Ala
          50           55           60
Met Val Lys Lys Phe Met Ala Gln Leu Val Glu Gly Ile Arg Tyr Cys
65           70           75           80
His Ser His Arg Ile Leu His Arg Asp Leu Lys Pro Gln Asn Leu Leu
          85           90           95
Ile Asp Arg Asp Gly Asn Leu Lys Leu Ala Asp Phe Gly Leu Ala Arg
          100          105          110
Ala Phe Gly Val Pro Leu Arg Thr Tyr Thr His Glu Val Arg Pro Leu
          115          120          125
Gly His Ile Asp Cys His Ser Thr
          130          135

```

&lt;210&gt; 44103

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44103

```

Asn Thr Tyr Met Val Leu Gln Val Val Thr Leu Trp Tyr Arg Ser Pro
1           5           10           15
Glu Ile Leu Leu Gly Gly Arg Gln Tyr Ser Thr Gly Val Asp Met Trp
          20           25           30
Ser Cys Gly Ala Ile Phe Ala Glu Met Cys Thr Arg Lys Pro Leu Phe
          35           40           45
Val Phe Thr Pro Arg Gly Trp Thr Glu Pro Arg Cys Gly
          50           55           60

```

&lt;210&gt; 44104

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (74), (248)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44104

```

Lys Tyr Tyr Pro Leu Asp Lys Asn Pro Pro Lys Pro Leu Ser Gly Gly
1           5           10           15
Leu Ser Ala Arg Glu Thr Gly Thr Arg Arg Val Ser Val Gly Glu Asn

```

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |  |  |  |
| Asn | Leu | Arg | Pro | Glu | Glu | Cys | Leu | Trp | Leu | Ala | Asp | Leu | Arg | Val | Gly |  |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |  |
| Ser | Arg | Ser | Val | Ile | Pro | Glu | Thr | Gly | Tyr | Ile | Ser | Met | Ala | Leu | Glu |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |
| Ala | Ala | Arg | Met | Met | Val | Glu | Thr | Gln | Xaa | Leu | Arg | Leu | Leu | Ser | Val |  |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |  |
| Lys | Asp | Phe | Thr | Val | His | Thr | Pro | Val | Pro | Ile | Gln | Asn | Asp | Ala | Ile |  |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |  |
| Gly | Thr | Glu | Ile | Leu | Val | Thr | Val | Asn | Asp | Ile | Phe | Ser | His | Asp | Gly |  |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |  |
| Val | Ile | Ser | Ala | Leu | Phe | Arg | Cys | Glu | Ala | Ala | Val | Ser | Asp | Glu | Phe |  |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |  |
| Val | Lys | Cys | Ala | Thr | Ala | Lys | Met | Ile | Met | His | Pro | Gly | Asp | Pro | Asp |  |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |  |
| Arg | Ala | Leu | Leu | Pro | Thr | Gln | Gly | Gln | Arg | Ala | Leu | Ala | Ala | Gly | Pro |  |  |  |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |     |  |  |  |
| Val | Asp | Ile | Asn | Gly | Phe | Tyr | Asn | Ser | Leu | Arg | Cys | Val | Asp | Tyr | His |  |  |  |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |  |
| Cys | Thr | Gly | Pro | Phe | Ala | Gly | Leu | Thr | Gly | Leu | His | Arg | Gly | Cys | Asp |  |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |  |
| Leu | Ala | Thr | Gly | Thr | Val | His | Val | Pro | Ser | Arg | Asp | Pro | Asp | Gly | Pro |  |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |  |
| Ile | Ile | Leu | His | Pro | Ala | Thr | Leu | Glu | Leu | Ala | Ile | Gln | Ala | Met | Ile |  |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |  |
| Ala | Ala | Leu | Gly | Ala | Pro | Asp | Glu | Gly | Leu | Leu | Thr | Gly | Ala | Leu | Leu |  |  |  |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     | 240 |     |  |  |  |
| Ser | Lys | Thr | Val | Asp | Asn | Ser | Xaa | His | Leu | Arg | Arg | Cys | Arg | Thr | Gly |  |  |  |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |  |

```
<210> 44105
<211> 135
<212> PRT
<213> A.fumigatus
```

|       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> | 44105 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Asp   | Thr   | Thr | Ile | Ala | Gly | Arg | Trp | Leu | Lys | Tyr | Gly | Arg | Ala | Ala | His |
| 1     |       |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp   | Ser   | His | Glu | Ser | Gln | Asp | Asn | Asp | Glu | Thr | Arg | Ala | Asp | Ser | Ser |
|       |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro   | Gly   | Asp | Gly | Ser | Thr | Arg | Ser | Glu | Gln | Gln | Gly | Glu | Arg | Gln | Gln |
|       |       |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |
| Arg   | Asp   | Gly | Ala | Asn | Arg | Pro | Asn | Glu | Phe | Ala | Ala | Lys | Ala | Ala | Ala |
|       | 50    |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Trp   | Ala   | Glu | Gln | Phe | Ser | Asp | Thr | Trp | Glu | Asp | Ile | Lys | Pro | Trp | Ala |
| 65    |       |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg   | Leu   | Leu | Tyr | Lys | Ala | Ala | Arg | Leu | Tyr | Gly | Ser | Trp | Ser | Ser | Arg |
|       |       |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser   | Ser   | Pro | Ser | Gly | Phe | Asp | Tyr | Phe | Ala | Asp | Asp | Ala | Ser | Glu | Asn |
|       |       |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile   | Ser   | Leu | Thr | Thr | Ser | Ile | Phe | Val | Gln | Asn | Phe | His | Phe | Arg | Gly |
|       |       | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala   | Gly   | Asp | Pro | Arg | Met | His |     |     |     |     |     |     |     |     |     |
|       | 130   |     |     |     |     | 135 |     |     |     |     |     |     |     |     |     |

<210> 44106



## 19929

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44106

```

Leu His His Cys Ser Gly Lys Thr Ser Leu Ile Met Ser Leu Phe Arg
1          5          10          15
Met Val Glu Leu Ser Ser Gly Ser Ile His Ile Asp Gly Val Asp Ile
          20          25          30
Thr Lys Ile Pro Arg Gln Glu Ile Arg Ser Arg Ile Asn Gly Val Ser
          35          40          45
Gln Ser Pro Leu Leu Ile Lys Gly Ser Ile Arg Arg Asn Met Asp Pro
          50          55          60
Asn Gly Ser Tyr Ala Glu Lys Ala Ile Ile Glu Ala Ile Lys Ser Val
65          70          75          80
Gly Leu Tyr Thr Lys Ile Gln Glu Lys Gly Gly Leu Asp Thr Asp Ile
          85          90          95
Ser Glu Val Phe Leu Ser Gln Gly Gln Gln Leu Phe Cys Leu Ala
          100          105          110
Arg Ala Ile Leu Arg Pro Gly Lys Val Leu Val Leu Asp Glu Ala Thr
          115          120          125
Ser Lys Tyr Val Thr Thr Ser Ser Pro Pro Pro Cys Ser Trp Asp Ile
          130          135          140
Ile Leu Thr Ile Ser Thr Thr Ala Ser Thr Gln Arg Gln Thr Lys Ser
145          150          155          160
Cys Lys Glu Leu Ser Glu Arg Asn Ser Ala Arg Thr Pro Phe Ser Pro
          165          170          175
Ser Pro Thr His Ser Arg Gln Phe Tyr Thr Ala Ala Leu Arg
          180          185          190

```

&lt;210&gt; 44107

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44107

```

Ser Ser Val Arg Pro Ser Gln Cys Leu Ile Thr Pro Leu Gln Arg Gln
1          5          10          15
Asn Leu Thr Asp His Glu Ser Leu Pro Asn Gly Arg Ala Gln Leu Gly
          20          25          30
Lys Tyr Ser Tyr Arg Trp Arg Arg His His Gln Asp Ser Pro Ser Arg
          35          40          45
Asp Pro Leu Thr His Gln Arg Arg Phe Ser Lys Pro Ala Pro Asp Gln
          50          55          60
Arg Gln His Gln Thr Gln His Gly Pro Gln Trp Phe Leu Arg Arg Glu
65          70          75          80
Ser His Asn Arg Ser His Lys Val Cys Arg Ala Leu Tyr Gln Asp Pro
          85          90          95
Arg Glu Arg Arg Thr Arg His Arg His Gln Arg Gly Leu Pro Leu Ala
          100          105          110
Arg Pro Thr Thr Ala Leu Leu Ser Arg Ala Ser Tyr Pro Pro Ala Gly
          115          120          125
Glu Gly Pro Arg Pro Arg Arg Ser Tyr Lys Gln Val Arg His Asp Leu
          130          135          140
Ile Ser Ser Thr Leu Leu Met Gly Tyr His Ile Asp His Ile His Asn
145          150          155          160

```

## 19930

Ser Val Asp Ala Lys Thr Asp Glu Ile Met Gln Arg Val Ile Arg Glu  
                   165                  170                  175  
 Lys Phe Cys Thr His Thr Ile Leu Ala Val Ala His Thr Leu Glu Thr  
                   180                  185                  190  
 Ile Leu His Ser Arg Pro Glu Val Val Asn  
                   195                  200

&lt;210&gt; 44108

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (52), (54)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44108

Pro Asp Ser Thr Ile Ala Ala Ala Asp Phe Arg Thr Asp Ala Pro Ile  
 1                  5                  10                  15  
 Gly His Pro Ile Ser Met Ser Gln Asn Ala Gln Met Gln Gln Arg Arg  
                   20                  25                  30  
 Met Ser His Val Gly Ser Pro His Val Gln Thr Val Gln Pro Val Leu  
                   35                  40                  45  
 Asn His Val Xaa Arg Xaa Ser Phe Pro Pro Pro Met Ala Pro His Leu  
                   50                  55                  60  
 Gln Pro Val Gln Gln Ser Gln Pro Ser Pro Glu Leu Val Ala Gly Ala  
 65                  70                  75                  80  
 Ala Glu Glu Ser Pro Leu Tyr Val Asn Ala Lys Gln Phe His Arg Ile  
                   85                  90                  95  
 Leu Lys Arg Arg Val Ala Arg Gln Lys Leu Glu Glu Gln Leu Arg Leu  
                   100                  105                  110  
 Thr Ser Lys Gly Arg Lys Pro Tyr Leu His Glu Ser Arg His Asn His  
                   115                  120                  125  
 Ala Met Arg Arg Pro Arg Gly Pro Gly Gly Arg Phe Leu Thr Ala Asp  
                   130                  135                  140  
 Glu Val Ala Ala Met Glu Lys Lys Gln Ala Ala Thr Ala Ala Gly Ser  
 145                  150                  155                  160  
 Gly Gln Glu Asn Val Asp Ser Gly Lys Pro Ala Glu Glu Asn Pro Ser  
                   165                  170                  175  
 Ser Ala Pro Lys Arg Lys Ser Ser Glu Val Asn Asp Asp Asn Ala Asn  
                   180                  185                  190  
 Ser Val Lys Lys Ser Lys Thr Gly Gly Ala Thr Arg Pro Ala Glu Glu  
                   195                  200                  205  
 Ser Glu Arg Glu Ser Ala Glu Pro Thr Asp Glu Asp Gly  
                   210                  215                  220

&lt;210&gt; 44109

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44109

Glu Arg Ala Leu Asp Phe Glu Lys Arg Lys Arg Glu Val Ile Thr Arg  
 1                  5                  10                  15  
 Leu Arg Glu Gln Arg Lys Asp Ala Ser Ala Ala Asn Leu Pro His Val

## 19931

```

          20          25          30
Ser Arg Tyr Leu Ala Ala Lys Ala Ala Leu Gln Pro Asp Val Asn Asn
    35          40          45
Asn Asn Ala Gly Pro Ala Pro Pro Ile Ser Glu Thr Asp Asn Pro Ser
    50          55          60
Pro Arg Leu Asn Pro His Asp Pro Arg Ser Tyr Leu Met Arg Asn Lys
    65          70          75          80
Pro Ser His Asp Lys Arg Arg Leu Ala Ser Asp Pro Ala Lys Ile Arg
          85          90          95
Arg Ile Gln Thr Asn Lys Leu Pro Phe Glu Lys Ile Pro Asp Gly Cys
          100          105          110
Glu Leu His Asp Leu Cys Leu Val Gln Ser Ala Asp Ile Ser Leu Ile
          115          120          125
Ser Glu Thr Phe Cys Asn Leu Tyr Glu His Asp Leu Tyr Ile Arg Glu
          130          135          140
Gly Asp Asn Phe Ala Gly Phe Thr Asp Ala Asp Leu Gln Ser Leu Ser
          145          150          155          160
Leu Trp Glu Ser Gln Leu Ser Ser Leu Ile Lys Gln Gln Phe Val Phe
          165          170          175
Thr Thr Gly Gly Arg Lys Asp Pro Arg Tyr Lys Tyr
          180          185

```

<210> 44110  
 <211> 61  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44110
Asn Asn Cys Ser Leu Pro Arg Glu Val Tyr Lys Ser Glu Thr Leu His
1          5          10          15
Pro Asp Thr Tyr Asp Gln Lys Tyr Tyr Asn Ala Ile Pro Ala Ile Lys
          20          25          30
Pro Asp Ala Val Gly Val Arg Ser Glu Ser Val His Thr Gln Glu Val
          35          40          45
Ser Ala Cys His Arg Glu Leu Leu Glu Leu Asp Val Phe
          50          55          60

```

<210> 44111  
 <211> 69  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44111
Arg Ser Pro Arg Ile Gly Gln Phe Leu Phe Gly Ile Ser Ala Ala Pro
1          5          10          15
Asn Leu Leu Leu Glu Asp Val Lys Phe Glu Lys Leu Thr Val Ala Ser
          20          25          30
Thr Tyr Leu Leu Cys Met Tyr Ala Phe Thr Pro Asp Thr His Arg Ile
          35          40          45
Gly Leu Asp Ser Arg Tyr Gly Val Val Val Phe Leu Val Val Ser Val
          50          55          60
Arg Val Glu Cys Leu
65

```

<210> 44112  
 <211> 89

19932

<212> PRT

<213> A.fumigatus

<400> 44112

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Gly | Thr | His | Leu | Val | Arg | Thr | Gly | Gly | Cys | Val | Val | Lys | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Asp | Gly | Leu | Trp | Pro | His | Thr | Thr | Thr | Phe | Glu | Thr | Ala | Leu | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Leu | Gly | Lys | Glu | Ser | Gly | Val | Lys | Ile | Leu | Ala | Leu | Arg | Thr | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Ser | Asp | Val | Cys | Val | Gly | Ile | Pro | Thr | Gln | Ser | Lys | Val | Asp | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Asn | Glu | Glu | Ala | Pro | Asp | Gly | Ala | Trp | Ile | Arg | Asn | Gly | Lys | Tyr |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Ala | Ile | Val | Ser | Phe | Ser | Glu | Gly | Gln |     |     |     |     |     |     |     |
|     |     |     |     | 85  |     |     |     |     |     |     |     |     |     |     |     |

<210> 44113

<211> 150

<212> PRT

<213> A.fumigatus

<400> 44113

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Asp | Ser | Leu | Ala | Ala | Leu | Ile | Leu | Glu | Arg | Leu | Gln | Ser | Val | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Val | Gly | Asp | Tyr | Asn | Val | Asp | Ser | Arg | Thr | Pro | Arg | Glu | Ala | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Asp | Gly | Ser | Lys | Leu | Leu | Val | Thr | His | Tyr | His | Asp | Ala | Ile | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Ala | His | Ser | Glu | Val | Arg | Gln | Thr | Leu | Pro | Leu | Ile | Ile | Lys | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Tyr | Thr | Asp | Ala | Leu | Val | Ala | Gln | Pro | Phe | Ser | Lys | Leu | Leu | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Pro | Val | Val | Asp | Gln | Cys | His | Trp | Ala | Asn | Asn | Glu | Cys | Phe | Leu | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| His | Trp | Arg | Ala | Phe | Met | Asp | Arg | Ile | Leu | Phe | Gln | Gln | Ser | Pro | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Gln | Arg | Asp | Arg | Leu | Gln | Ser | Leu | Pro | Gln | Thr | His | Val | Ile | Gly | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Tyr | Ser | Ala | Phe | Ser | Val | Glu | Arg | Ser | His | Ser | His | Asp | Ala | Leu | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | Glu | Leu | Asp | Ala | Leu |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     |     |     |     |     |     |     |

<210> 44114

<211> 189

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (179), (180), (181), (182), (183), (184), (185), (186), (187), (188), (189)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44114

Glu Gly Val Gln Phe Leu Tyr Glu Cys Val Met Gly Met Arg Ser Phe

## 19933

```

1           5           10           15
Asn Gly Glu Gly Ala Ile Leu Ala Asp Asp Met Gly Leu Gly Lys Thr
      20           25           30
Leu Gln Thr Ile Thr Leu Leu Trp Thr Leu Leu Lys Gln Asn Pro Ile
      35           40           45
His Glu Ser Pro Pro Val Ile Lys Lys Ala Leu Ile Val Cys Pro Val
      50           55           60
Thr Leu Ile Asn Asn Trp Arg Lys Glu Phe Arg Lys Trp Leu Gly Asn
      65           70           75           80
Glu Arg Ile Gly Val Phe Val Phe Asp Asp Lys Arg Lys Arg Leu Thr
      85           90           95
Asp Phe Thr Met Gly Arg Ala Tyr Ser Val Met Ile Val Gly Tyr Glu
      100           105           110
Lys Leu Arg Thr Val Gln Glu Gly Leu Ala Arg Gly Ala Gly Val Asp
      115           120           125
Ile Ile Ile Ala Asp Glu Gly His Arg Leu Lys Thr Leu Gln Asn Lys
      130           135           140
Ser Gly Gln Ala Ile Gln Ser Leu Asn Ala Thr Lys Arg Ile Ile Leu
      145           150           155           160
Ser Gly Thr Pro Ile Gln Asn Asp Leu Lys Glu Ser Ser Arg Arg Trp
      165           170           175
Ile Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      180           185

```

&lt;210&gt; 44115

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (122)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44115

```

Ser Tyr Phe Ser Ile Cys Arg Arg Lys Arg Pro Phe Pro Thr Thr Ser
1           5           10           15
Thr Arg Thr Cys Val Phe Thr Val Thr Ile Leu Gln Cys Leu Tyr Lys
      20           25           30
Pro Phe Ser Ser Ile Ser Ser Leu Ser Phe Ile Ser Leu His Pro Ser
      35           40           45
Ile Ser Asn Phe His Leu Arg Ser Thr Leu Gln Thr Asp Lys Arg Thr
      50           55           60
Thr Thr Thr Pro Ser Thr Thr Ser Pro Pro Met Lys Leu Asn Ala Ile
      65           70           75           80
Leu Leu Phe Ser Leu Ile Gly Leu Gly Leu Ala Thr Pro Val Thr Val
      85           90           95
Asp Gly Asn Leu Thr Thr Pro Gly Asp Ser Thr Ser Leu His Pro Leu
      100           105           110
Ala Thr Thr Ser His Pro Ala Asp Pro Xaa
      115           120

```

&lt;210&gt; 44116

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19934

&lt;400&gt; 44116

```

Thr Cys Leu His Arg Leu Val Lys Ile Asn His Lys Glu Ile Arg His
1           5           10           15
Leu Tyr Arg Ala Leu Val Arg Tyr Gly Asp Ile Asn Glu Arg Thr Glu
           20           25           30
Asp Phe Leu Arg Glu Ala Arg Leu Met Asp Arg Asp Arg Glu Thr Ile
           35           40           45
Val Ala Val Leu Arg Glu Met Ser Asp Met Ala Ala Gln Leu Ile Arg
           50           55           60
Glu Asp Asp Ala Lys Met Glu Ala Leu Glu Lys Ala Gly Lys Met Val
65           70           75           80
Thr Lys Lys Glu Arg Lys Ala Val Leu Phe Asp Phe Lys Gly Ala Asn
           85           90           95
Arg Leu Asn Ala His His Ile Val Asp Arg Pro Arg Asp Leu Arg Ile
           100          105          110
Leu Arg Gln Val Thr Ser Ser Val Ala Asp Val Lys Ser Phe Arg Ile
           115          120          125
Pro Glu Ala Thr Lys Ala Ala Asp Tyr Ser Cys Ser Trp Gly Ala Arg
           130          135          140
Glu Asp Gly Met Leu Cys Val Gly Val Ala Arg His Gly Trp Gly Ala
145          150          155          160
Trp Thr Gln Ile Arg Asp
           165

```

&lt;210&gt; 44117

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (66)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44117

```

Asn Gln Phe Met Phe Val Pro Gly Val Glu Arg Met Gly Glu Lys Pro
1           5           10           15
Ser Pro Ile Pro Gly Ile Pro Ser Ala Ile Leu Gly Ser Arg Leu Gln
           20           25           30
Ile Gln Arg Ile Cys Ser Pro Gln Arg Pro Thr Glu Leu Gln Ser Glu
           35           40           45
Thr Val Asn Lys Met Pro Ala Ile Ala Glu Gly Asn Ser Thr Thr Val
           50           55           60
Lys Xaa Val Pro Phe Asn Lys Tyr Gly Val Pro Ala Leu Gln Arg Lys
65           70           75           80
Asp His Leu Glu Tyr Leu Tyr Asp Ser Leu Glu Asp Tyr Pro Ala Ser
           85           90           95
Phe Val Ala Leu Asp Ala Ser Arg Pro Trp Met Val Tyr Trp Ala Leu
           100          105          110
Ala Gly Leu Cys Leu Leu Gly Glu Asp Val Thr Arg Phe Arg Glu Arg
           115          120          125

```

&lt;210&gt; 44118

&lt;211&gt; 124

&lt;212&gt; PRT

## 19935

&lt;213&gt; A.fumigatus

&lt;400&gt; 44118

```

Asp Ala Thr Ala Thr Ser Lys Val Pro Gln Val Asp Glu Val Ala Glu
1      5      10      15
Asp Leu Ser Lys Thr Thr Leu Glu Asn Asp Asn Thr Ala Ala Glu Glu
      20      25      30
Pro Ala Gln Ser Thr Glu Asp Val Glu Ile Pro Glu Thr Ala Gln Ala
      35      40      45
Asp Asp Ala Glu Thr Gly Gly Glu Asp Asp Asp Gly Ser Asp Ser Asp
      50      55      60
Gly Gly Trp Ile Thr Pro Ser Asn Leu Lys Lys Arg Gln Ala Leu Asp
65      70      75      80
Glu Ser Ile Ser Ala Ser Ala Ala Pro Glu Pro Lys Val Met Gln Val
      85      90      95
Ala Thr Met Thr Thr Asp Phe Ala Val Ser Ser Asp Lys Val Leu Pro
      100      105      110
Arg Trp Phe Tyr Ile Leu His Arg Arg His Gly Lys
      115      120

```

&lt;210&gt; 44119

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44119

```

Leu Phe Cys Leu Leu Phe Phe Ser Leu Ser Tyr Asp Thr Leu His Asn
1      5      10      15
Val Ile Thr Thr Thr Ser Pro Asn Ala Asp Lys Ser Ser Gln Thr Thr
      20      25      30
Leu Pro Leu Leu Leu Gly Leu Thr Thr Ser Arg Leu Gln Pro Glu Thr
      35      40      45
Ser Thr His Ala Pro Pro Pro Ala Asp Val Leu Pro Ser Gln Tyr Arg
      50      55      60
Gln
65

```

&lt;210&gt; 44120

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44120

```

Gln Arg Ala Leu Arg Val Ala Asp Ala Cys Met Asp Thr Ala Val Ser
1      5      10      15
Val Glu Leu Phe Val Glu Ile Leu Asn Arg Tyr Val Tyr Tyr Phe Asp
      20      25      30
Gln Gln Asn Glu Thr Val Thr Thr Lys Tyr Leu Asn Gly Leu Ile Glu
      35      40      45
Leu Ile His Ser Asn Leu Gln Thr Asn Glu Asp Glu Pro Asn Pro Ser
      50      55      60
Leu Glu Gly Pro Lys Arg His Phe Gln Arg Thr Leu Glu Tyr Ile Arg
65      70      75      80
Ser Arg Glu Tyr Glu Gly Val Val Thr Asp Pro Arg Gln
      85      90

```

<210> 44121  
 <211> 135  
 <212> PRT  
 <213> A.fumigatus

<400> 44121  
 Ser Gly Pro Ser Ala Leu Gln Thr Pro Ala Trp Thr Pro Pro Ser Pro  
 1 5 10 15  
 Leu Ser Tyr Ser Ser Arg Ser Ser Thr Ala Thr Ser Thr Thr Ser Thr  
 20 25 30  
 Ser Arg Thr Lys Pro Ser Gln Pro Ser Thr Ser Thr Ala Ser Ser Ser  
 35 40 45  
 Ser Ser Thr Pro Thr Cys Lys Pro Thr Arg Thr Ser Arg Ile Pro Ala  
 50 55 60  
 Ser Arg Val Gln Ser Val Thr Ser Ser Val Arg Trp Ser Ile Ser Ala  
 65 70 75 80  
 Pro Glu Asn Thr Arg Ala Leu Ser Pro Ile Arg Asp Ser Glu Leu Ser  
 85 90 95  
 Arg Arg Phe Cys Asp Leu Ser Gly Leu Glu Met Ile Ile Ser Cys Lys  
 100 105 110  
 Lys Arg Glu Ser Val Ala Thr Leu Phe Phe Phe Pro Pro Val Ser Val  
 115 120 125  
 Ser Pro Phe Pro Gly Ser Phe  
 130 135

<210> 44122  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<400> 44122  
 Pro Trp Cys Pro Asp Phe Ala Pro Leu Leu Thr Thr Ile Gly Val Ala  
 1 5 10 15  
 Gly His Ile Thr Leu Arg Asp Pro Val Glu Pro Asp Thr Phe Trp Val  
 20 25 30  
 Asn Pro Phe Gly Val Ala Phe Ser Gln Ile Lys Ala Ser Asp Leu Ile  
 35 40 45  
 Arg Val Asn His Glu Gly Lys Val Ile Asp Gly Gly Glu Val Arg Leu  
 50 55 60  
 Leu Asn Ala Ala Ala Tyr Met Ile His Ser Ala Ile His Ala Ala Arg  
 65 70 75 80  
 Pro Asp Val Val Cys Ala Ala His Ser His Ser Leu His Gly Arg Ala  
 85 90 95  
 Phe Cys Thr Leu Gly Arg Pro Leu Asp Ile Ile Thr Gln Asp Ser Cys  
 100 105 110  
 Ala Phe Tyr Asn Val Arg Ser Ser Arg Ala Tyr Val  
 115 120 125

<210> 44123  
 <211> 148  
 <212> PRT  
 <213> A.fumigatus

<400> 44123  
 Thr Asn Ser Ser His Thr Lys Arg Asn Ala Arg Gln Gln Gln Ser Leu  
 1 5 10 15



## 19937

Pro Ser Arg Tyr Arg Asp Arg Pro Val Val Thr Ser Ile Pro His Cys  
 20 25 30  
 Leu Leu Cys Ile Leu Thr Ile Asn Thr His Glu Leu His Val Glu Gln  
 35 40 45  
 Ile Asn Thr Thr Val Ile Thr Ala Ser Ile Thr Ser Gly Ile Lys Thr  
 50 55 60  
 Ser Lys Thr Thr Pro Glu Gly Pro Pro Ile Leu Pro Ala Arg Pro Pro  
 65 70 75 80  
 Pro Ser Thr Gln Ser Ser Leu Pro Pro Arg Leu Gln His His Gly Ala  
 85 90 95  
 Ala Thr Ser Arg Leu Pro Gln Asp Pro Pro Arg Leu Pro Pro Thr His  
 100 105 110  
 Leu Ser Ala Thr Gly Arg Ser Ser Pro Ser Leu Pro Pro Ser Val Ala  
 115 120 125  
 Ala Ser Gly Gly His Lys Gly Ile Ser Arg Leu Asp Pro Pro Val Asp  
 130 135 140  
 Arg His Thr Gly  
 145

&lt;210&gt; 44124

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44124

Phe Ser Ser Arg Leu Val Asn Lys Gly Phe Gly Gln Phe Ala Ala Ala  
 1 5 10 15  
 Ile Val Ala Leu Ile Val Thr Ala Gly Phe Lys Glu Ser Leu Glu Thr  
 20 25 30  
 Ala Ser Ser Val Gly Lys Cys Ser Gly Val Cys Gln Leu Ala Val Asp  
 35 40 45  
 Lys Met Trp Arg Val Val Ile Gly Phe Gly Ala Val Pro Ala Cys Ile  
 50 55 60  
 Ala Leu Tyr Tyr Arg Leu Thr Ile Pro Glu Thr Pro Arg Tyr Thr Phe  
 65 70 75 80  
 Asp Val Ala His Asp Ile Val Lys Ala Asp Glu Asp Val Arg Ala Tyr  
 85 90 95  
 Met Thr Gly Lys His Glu Gly His Pro Asp Glu Ile Arg Arg Gln Ser  
 100 105 110  
 Val Leu Gln Lys His Ala Gly Asp Val Thr Pro Lys Ala Ser Trp Ala  
 115 120 125  
 Asp Phe Trp Arg His Tyr Leu Gln Trp Lys Asn Gly Ser Ile Leu Leu  
 130 135 140  
 Gly Thr Ala Gly Ser Trp Phe Phe Leu Asp Val Gly Lys Ser Arg Cys  
 145 150 155 160  
 Leu Pro Thr

&lt;210&gt; 44125

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (196)

## 19938

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44125

```

Trp Phe Arg Cys Val Gly Asp Tyr Val Asp Arg Gly Leu Phe Ser Val
1           5           10           15
Glu Thr Ile Ser Leu Leu Val Cys Leu Lys Leu Arg Tyr Pro Gln Arg
          20           25           30
Val His Leu Ile Arg Gly Asn His Glu Ser Arg Gly Val Thr Gln Ser
          35           40           45
Tyr Gly Phe Tyr Thr Glu Cys Ala Arg Lys Tyr Gly Asn Ala Asn Val
          50           55           60
Trp His Tyr Phe Thr Asp Met Phe Asp Phe Leu Thr Leu Ser Val Val
65           70           75           80
Ile Asn Asp Gln Ile Phe Cys Val His Gly Gly Leu Ser Pro Ser Ile
          85           90           95
His Ser Ile Asp Gln Ile Lys Ile Ile Asp Arg Phe Arg Glu Ile Pro
          100          105          110
His Glu Gly Pro Met Ala Asp Leu Val Trp Ser Asp Pro Asp Thr Glu
          115          120          125
Arg Asp Glu Phe Ser Leu Ser Pro Arg Gly Ala Gly Tyr Thr Phe Gly
          130          135          140
Ala Gln Val Val Arg Lys Phe Leu Glu Val Asn Ser Met Ser His Ile
145          150          155          160
Leu Arg Ala His Gln Leu Cys Gln Glu Gly Tyr Gln Val Leu Tyr Asp
          165          170          175
Asp Arg Leu Ser Thr Val Trp Ser Ala Arg Asn Tyr Cys Ser Arg Phe
          180          185          190
Gly Asn Cys Xaa
          195

```

<210> 44126

<211> 274

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (259), (262)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44126

```

Lys Arg Asn Phe Arg Ser Leu Val Trp Gly Thr Val Pro Gly Trp Ile
1           5           10           15
Phe His Pro Leu Thr Gly Gly Pro Ile Gly Tyr Gly Gly Tyr Asp Cys
          20           25           30
Val Arg Tyr Phe Glu Pro Lys Thr Ala Arg Pro Leu Arg Asp Val Leu
          35           40           45
Gly Ile Pro Glu Ser Leu Phe Met Met Phe Lys Thr Ile Val Ala Phe
          50           55           60
Asp His Phe Phe Gln Val Ile Lys Val Val Thr Tyr Ile Pro Ile Ser
65           70           75           80
Gly Pro Asp Ser Glu Leu Glu Ala Glu Tyr Arg Asn Gly Gln Glu Ala
          85           90           95
Leu Gln Gln Thr Ile Asp Leu Leu Leu Arg Pro Glu Cys Pro Phe Pro
          100          105          110
Phe Gln Gly Pro Ile Ile Pro Asn Gln Glu Tyr Thr Ser Asn Ile Gly

```

## 19939

```

      115              120              125
Arg Glu Gly Tyr Glu Arg His Val Thr Arg Leu Lys Glu His Ile Ser
      130              135              140
Lys Gly Asp Ile Phe Gln Thr Val Pro Ser Gln Arg Leu Ser Arg Pro
145              150              155              160
Thr Ser Leu His Pro Phe Asn Leu Phe Arg His Leu Arg Thr Val Asn
      165              170              175
Pro Ser Pro Tyr Leu Phe Tyr Ile Asp Cys Glu Glu Phe Gln Leu Val
      180              185              190
Gly Ala Ser Pro Glu Leu Leu Val Lys Glu Glu Lys Gly Arg Ile Ile
      195              200              205
Thr His Pro Ile Ala Gly Thr Val Lys Arg Gly Lys Ser Pro Glu Glu
      210              215              220
Asp Asp Ala Leu Ala Ala Glu Leu Arg Gly Ser Leu Lys Asp Arg Ala
225              230              235              240
Glu His Val Met Leu Val Asp Leu Ala Arg Asn Asp Val Asn Arg Val
      245              250              255
Cys Asp Xaa Asn Pro Xaa Arg Pro Gly Lys Glu Gly Asn Ala Ser Pro
      260              265              270
Pro Pro

```

&lt;210&gt; 44127

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (60), (83)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44127

```

Arg Ile Thr His Trp Pro Asp Lys Leu Pro Glu Val Ala Thr Leu Pro
1              5              10              15
Ala Phe Ser Gln Leu Ala Gly Ser Pro Arg Asp Gly Thr Asn Lys Val
      20              25              30
Tyr Phe Gln Ile Val Arg Tyr Leu Arg Glu Met Gly Tyr Phe Ser Gln
      35              40              45
Asp Leu Lys Thr Ala Phe Val Ser Asn Asn Arg Xaa Ser Asn Leu Leu
      50              55              60
Arg Lys Asp His Trp Ala Thr Trp Ile Asn Trp Val Asp Phe Phe Pro
65              70              75              80
Arg Glu Xaa

```

&lt;210&gt; 44128

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (23)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

## 19940

&lt;400&gt; 44128

```

Tyr Asp Leu Leu Ser Arg Leu Pro Asp Gln Leu Arg Ser Asp Gln Pro
1          5          10          15
Lys Thr Ala Thr Glu Leu Xaa Tyr Asn Thr Asp Lys Pro Ile Tyr Gln
          20          25          30
Tyr Leu Ala Glu Thr Gly Arg Ala Ala Gly Phe His Lys Val Thr Gly
          35          40          45
Thr Gly Ser Val Val Glu Ala Pro Gly Leu Leu Ala Asp Tyr Pro Trp
          50          55          60
Glu Glu Val Lys Ser Glu Thr Val Val Asp Val Gly Ala Gly Val Gly
65          70          75          80
Asp Phe Ile Arg Ser Tyr Leu Glu Lys Phe Pro Asp Ala Thr Ala Ala
          85          90          95
Ala Phe Glu Leu Pro Ser Thr Ala Glu Ile Leu Lys Gln Arg Phe Pro
          100          105          110
Asp Asp Asp Pro Leu Thr Ser Arg Ile Val Ser Ile Thr Gly Gly Asp
          115          120          125
Phe Phe Gln Asp Pro Ile Pro Glu Ser Ser Val Tyr Leu Leu Arg Trp
          130          135          140
Ile Leu His Asn Trp Gly Asp Glu Asp Cys Ile Lys Leu Leu Arg Arg
145          150          155          160
Ile Arg Glu Thr Met Val Ile Lys Pro Gly Val Ser Arg Val Leu Ile
          165          170          175
Ile Glu Ser Val Leu Phe Asp Gly Arg Leu Gly Pro Gly Pro Arg Tyr
          180          185          190
Phe His His Ala Val Pro Gly Ser Thr Leu Arg Asp Ala
          195          200          205

```

&lt;210&gt; 44129

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (4), (36)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44129

```

Trp Arg Ser Xaa Ser Leu Thr Ser Ser Pro Pro Ser Pro Gly Asn Gly
1          5          10          15
Ser Thr Val Glu Ser Val Arg His Cys Leu Tyr Thr Ile Arg Arg Phe
          20          25          30
Leu Ala Pro Xaa Tyr Ala Val Ile Pro Val Thr Ala Asp Met Leu Ile
          35          40          45
Lys Glu Pro Trp Thr Leu Thr Cys Ala Leu Leu Val Ile Pro Gly Gly
          50          55          60
Ala Asp Leu Gly Tyr Cys Arg Ser Leu Asn Gly Thr Gly Asn Arg Arg
65          70          75          80
Ile Glu Gln Phe Val Lys Arg Gly Gly Ala Tyr Leu Gly Phe Cys Ala
          85          90          95
Gly Gly Tyr Tyr Gly Ser Lys Arg Cys Glu Phe Glu Val Gly Asp Lys
          100          105          110
Thr Met Glu Val Val Gly Asp Arg Glu Leu Ala Phe Phe Pro Gly Ile
          115          120          125
Cys Arg Gly Gly Ala Phe Pro Gly Phe Val Tyr His Ser Glu Val Gly

```

## 19941

|                     |                     |                     |     |     |
|---------------------|---------------------|---------------------|-----|-----|
| 130                 |                     | 135                 |     | 140 |
| Ala Arg Ala Ala Asp | Leu Lys Val Ser Lys | Asp Val Leu Gln Asp | Gly |     |
| 145                 | 150                 | 155                 | 160 |     |
| Gly Leu His Gln Thr | Ala Gly Arg Ser Tyr | Val Arg Glu Gly     |     |     |
|                     | 165                 | 170                 |     |     |

<210> 44130  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

<400> 44130  
 Pro Ser Arg Lys Glu Phe Thr Arg Ala Val Glu Gln Lys Gln Ile Ala  
 1 5 10 15  
 Gln Gln Asp Ala Glu Arg Ala Arg Phe Ile Val Glu Arg Ala Glu Gln  
 20 25 30  
 Glu Arg Gln Ala Asn Val Ile Arg Ala Glu Gly Glu Ala Glu Ser Ala  
 35 40 45  
 Glu Ile Ile Ser Lys Ala Val Ala Lys Ala Gly Ser Gly Leu Ile Glu  
 50 55 60  
 Ile Arg Arg Ile Asp Ala Thr Lys Glu Ile Ala Gln Thr Leu Ala Asn  
 65 70 75 80  
 Asn Pro Asn Val Thr Tyr Leu Pro Gly Asn Glu Gly Lys Asp Gly Gly  
 85 90 95  
 Lys Ser Thr Ser Leu Leu Leu Gly Leu Arg Asn  
 100 105

<210> 44131  
 <211> 86  
 <212> PRT  
 <213> A.fumigatus

<400> 44131  
 Cys Thr Leu Asp Phe Ser Pro Gly Asp Phe Val Leu His Leu Thr Ile  
 1 5 10 15  
 Arg Phe Lys Arg Leu Glu Arg Arg Ser Val Leu Ile Asp Thr Ile Leu  
 20 25 30  
 Ala Met Met Pro Gln Ile Lys Phe Cys Ala Ser Pro Val Ile Ser Leu  
 35 40 45  
 Leu Trp Leu Ser Lys Phe Lys Ser Thr Val Gln Ser Tyr Tyr His Leu  
 50 55 60  
 Ile His Ser Thr Leu Leu Leu Asn Thr Tyr Tyr Gln Val Gln Gly Tyr  
 65 70 75 80  
 Arg Ser Gln Val Ser Lys  
 85

<210> 44132  
 <211> 124  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (114)  
 <223> Identity of amino acid sequences at the above locations are unknown.

## 19942

&lt;400&gt; 44132

```

Pro Ser Thr Ala Gly Ala Ser Asn Gly Pro Asn Arg Ala Ser His Ser
1          5          10          15
Met Gly Thr Thr Gly Gln Pro Ala Ile Ile Tyr Leu Pro Ala Gly Thr
          20          25          30
Tyr Leu Ile Glu Gly Ser Leu Gln Leu Tyr Val Gly Thr Val Ile Val
          35          40          45
Gly Asn Ala Leu Asn Pro Pro Thr Leu Lys Ala Ser Ala Asn Phe Pro
          50          55          60
Asn Asp His Ile Val Tyr Gly Lys Glu Pro Gln Leu Gly Gly Thr Ile
65          70          75          80
Asn Phe Tyr Ile Gly Phe Lys Asn Val Ile Ile Asp Ser Thr Ser Val
          85          90          95
Ala Ala Phe Lys Ser Ile Thr Leu Leu Lys Trp Thr Val Ser Gln Ala
          100          105          110
Thr Xaa Leu Thr Asn Val Leu Phe His Met Pro Asp
          115          120

```

&lt;210&gt; 44133

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44133

```

Gln Gly Tyr Arg Thr Ile Thr Phe Pro Ile Gln Asn Lys Thr Ala Arg
1          5          10          15
Pro Trp Asp Pro Val Thr Gln Gly Ser Thr Gly Asn Leu Thr Ser His
          20          25          30
Asp Arg Gln Lys Arg Ala Ser Cys Gly Gly Pro Thr Pro Asp Asn Pro
          35          40          45
Asn Lys Phe Trp Leu Glu Thr Ile Thr His Ser Gly Glu Ser Ser Phe
          50          55          60
Leu Asp Ser Thr Tyr Lys His Asn Tyr Lys Val Phe Arg Asn Val Val
65          70          75          80
Thr Asp Phe Gly Ala Asp Asn Thr Gly Ala Lys Asp Ala Ser Ala Ala
          85          90          95
Ile Gln Asn Ala Ile Asn Gly Met Pro Phe Gly Pro Gly Cys Leu Tyr
          100          105          110
Arg Arg Ser Ala Asn Arg Gln Gln Leu Gly Pro Pro Thr Ala Pro Thr
          115          120          125
Gly Leu Ala Thr Pro Trp Ala Pro Arg Val Asn Leu Gln Ser Ser Thr
          130          135          140
Ser Arg Pro Gly Arg Ile
145          150

```

&lt;210&gt; 44134

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44134

```

Arg Asn Ser Lys Met Arg Leu Ser Ser His Leu Leu Ile Gly Val Ala
1          5          10          15
Leu Gln Asp Thr Ser Gly Arg Ala Thr Val Leu Val Pro Leu Thr Tyr
          20          25          30
Lys Asp His His Gly Thr Pro His Ala Ile His Asn Gly Thr Thr Tyr

```

[illegible]

```
<210> 44135
<211> 142
<212> PRT
<213> A.fumigatus
```

|       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> | 44135 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ser   | Thr   | Ala | Ala | Gln | Cys | Arg | Gly | Leu | Ala | Glu | Lys | Thr | Leu | Asn | Lys |
| 1     |       |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu   | Ala   | Ala | Cys | Thr | Leu | Ala | Pro | Cys | Ser | Phe | Asn | Gly | Val | His | Gln |
|       |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro   | Ser   | Leu | Glu | Lys | Thr | Phe | Ala | Arg | Glu | Asp | Val | Tyr | Ile | Phe | Ser |
|       |       | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr   | Phe   | Tyr | Asp | Arg | Thr | Lys | Pro | Leu | Gly | Met | Pro | Asp | Ser | Phe | Thr |
|       | 50    |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu   | Asp   | Glu | Leu | His | Gln | Leu | Thr | Ser | Thr | Val | Cys | Gly | Gly | Glu | Asp |
| 65    |       |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ser   | Trp   | Gly | Ile | Phe | Ala | Gly | Ile | Glu | Gly | Ala | Leu | Lys | Glu | Leu | Arg |
|       |       |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp   | Arg   | Pro | Glu | Trp | Cys | Leu | Asp | Leu | Asn | Phe | Met | Met | Ser | Leu | Leu |
|       |       |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| His   | Thr   | Gly | Tyr | Glu | Met | Pro | Leu | Ser | Arg | Glu | Val | Lys | Ile | Ala | Lys |
|       |       | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys   | Ile   | Lys | Asn | Arg | Glu | Leu | Gly | Trp | Cys | Leu | Gly | Ala | Arg |     |     |
|       | 130   |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |

```
<210> 44136
<211> 92
<212> PRT
<213> A.fumigatus
```

```

<400> 44136
Ile Phe Thr Thr Val Arg Gln Leu Asn Pro Pro Ala His Leu Arg Leu
1      5      10      15
His His Arg Arg Gln Pro Asn Asn Ser Tyr Pro Thr Val Lys Met Glu
      20      25      30
Asn Glu Lys Gly Glu Ile Val Asp Leu Tyr Val Asn Thr His Ser Phe
      35      40      45
Ala Val Leu Arg Leu Lys Trp Phe Tyr Gly Gly Pro Gly Ala Glu Asn
      50      55      60
Asp Phe Ala Ile Trp Asp Asn Ala Gln Glu Asp Lys Arg Gln Ala Gly
65      70      75      80
Ala Ser Phe Ser Leu His His Gly Ser Val Ala Glu
      85      90

```

19944

<210> 44137  
<211> 76  
<212> PRT  
<213> A.fumigatus

<400> 44137  
Ala Arg Leu Leu Leu Thr Leu Ile Arg Leu Phe Arg Pro Arg Ala Val  
1 5 10 15  
Ala Val Arg Leu His Asp Trp Arg Lys Asp Ile Gly Pro Ile Glu Ile  
20 25 30  
Glu Leu Ile Pro Met Arg Arg Ser Ile Asn Met Ala Gly Leu Glu Ile  
35 40 45  
Arg Ser Arg Cys Glu Thr Tyr Lys Ser Leu Cys Ile Met Gly Val Ile  
50 55 60  
Trp Ser Ser Glu Pro Met Glu Thr Gly Val Arg Phe  
65 70 75

<210> 44138  
<211> 62  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (53)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44138  
Arg Leu Arg Ile Arg Lys Leu Thr Arg Phe Pro Val Leu Asp Asp Asn  
1 5 10 15  
Thr Tyr Thr Asn Lys Thr Trp Ala Glu Val Ser Gly Ile Pro Val Pro  
20 25 30  
Glu Phe His Val Met Gly Ser Gln Ile Ser Gln Gln Met Cys Gly Thr  
35 40 45  
Ile Ser Met His Xaa Lys Glu Asp Trp Ala Leu Trp Ala Tyr  
50 55 60

<210> 44139  
<211> 188  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (8), (11), (13), (14)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44139  
Arg Ala Pro Pro Arg Met Glu Xaa Leu Phe Xaa Pro Xaa Xaa Lys Thr  
1 5 10 15  
Asn Thr Ile His Arg Arg Pro Asp Gln Leu Arg Leu Leu Ser Ile Gln  
20 25 30  
Glu Asp Arg Leu Arg Val Leu Ser Arg Lys Arg Leu Ala Arg Arg Arg  
35 40 45  
Gly Pro Arg Leu Gln Glu Glu Arg Arg Ala Leu Arg Thr Arg Leu Ala  
50 55 60



## 19945

Glu Met Arg Thr Arg His Ile Glu Ile Leu Ala Pro Val Met Asp Leu  
 65 70 75 80  
 Pro His Gly Leu Gly Val Gly Val Ser Arg His Ala Ile Leu Ala Val  
 85 90 95  
 Asp Gly Ala Val Pro Pro Arg Ala Leu Pro Gln Leu Val Arg Asp Val  
 100 105 110  
 Gln Ile Leu Val Arg Asn Thr Ile Pro Leu Ile Met Phe His Leu Arg  
 115 120 125  
 Val Glu Thr Lys Val Pro Arg Arg Gly Ile Gln Val Arg Ser Asp Asp  
 130 135 140  
 Val Pro Ser His Ala Ser Val Ala Glu Met Val Asp Arg Arg Glu Pro  
 145 150 155 160  
 Pro Arg Gln Gly Ile Gly Arg Val Ile Gly Cys Arg Arg Arg Asp Ala  
 165 170 175  
 Glu Ala Asp Ala Leu Pro Arg Gly Arg His Arg Arg  
 180 185

&lt;210&gt; 44140

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (175), (176), (178), (181)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44140

Ser Ala Met Ala Ala Pro Arg Glu Ser Ile Gly Phe Gly Ile Thr Ala  
 1 5 10 15  
 Ser Thr Thr Tyr Asp Ala Pro Tyr Ala Leu Ala Arg Arg Phe Ser Thr  
 20 25 30  
 Val Asp His Leu Ser Asn Gly Arg Val Gly Trp Asn Ile Val Thr Ser  
 35 40 45  
 Tyr Leu Asp Ser Ala Ala Arg Asn Phe Gly Leu Asn Thr Gln Val Glu  
 50 55 60  
 His Asp Glu Arg Tyr Arg Ile Ala Asp Glu Tyr Leu His Val Thr Tyr  
 65 70 75 80  
 Lys Leu Trp Glu Gly Ser Trp Arg Asp Gly Ala Val Asn Arg Lys Asp  
 85 90 95  
 Gly Val Ala Gly Tyr Ala Asp Pro Lys Ala Val Arg Gln Val His His  
 100 105 110  
 Arg Gly Lys Tyr Phe Asn Val Pro Gly Pro His Leu Cys Glu Pro Ser  
 115 120 125  
 Pro Gln Arg Thr Pro Phe Leu Leu Gln Ala Gly Thr Ser Ser Ala Gly  
 130 135 140  
 Lys Ala Phe Ala Ala Gln His Ala Glu Ala Ile Phe Leu Asn Gly Gln  
 145 150 155 160  
 Lys Pro Glu Leu Val Arg Pro Ser Val Asp Ser Ile Arg Leu Xaa Xaa  
 165 170 175  
 Gly Xaa Glu Lys Xaa Leu His Pro Gly Gly Gly Ala  
 180 185

&lt;210&gt; 44141

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44141

```

Ser Cys Ala Glu Val Gln Arg Arg Tyr Ser Gly Gly Leu Glu Ala Gly
1          5          10          15
Ser Phe Gly Asp Pro Asn Cys Ser Ser Trp Tyr Lys Thr Glu Asp Gly
          20          25          30
Arg Ile Thr Asp Asn Trp His Ser Thr Val Val Asp Tyr Gln Asn Glu
          35          40          45
Leu Ser Ser Ile Arg Trp Asp Asp Tyr Ile Ala Glu Gly Thr Gly Glu
          50          55          60
Ser Leu Ile Ala Lys Lys Lys Glu Met His Ile Gly Arg Val Arg Glu
65          70          75          80
Glu Thr Trp Ile Ser Asn Thr Ser Leu Leu Trp Gly Val Ala Ser Val
          85          90          95
Ala Val Ala Leu Gly Gly Tyr Tyr Leu Lys Gly Ser Ala Leu Ile Arg
          100          105          110
Gly Asn Arg Val Arg
          115

```

&lt;210&gt; 44142

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44142

```

Ser Leu Xaa Gly Leu Ile Thr Phe Cys Ala Ala Phe Trp Ala Leu Val
1          5          10          15
Val Lys Thr His Arg Ser Pro Glu Ala Gln His Leu Gly Leu Ser Val
          20          25          30
Lys Met Leu Thr Gly Asp Ala Leu Ala Ile Ala Lys Glu Thr Cys Lys
          35          40          45
Met Leu Ala Leu Ser Thr Lys Val Tyr Asp Ser Glu Arg Leu Ile His
          50          55          60
Gly Gly Leu Ala Gly Ser Ala Gln His Asp Leu Val Glu Lys Ala Asp
65          70          75          80
Gly Phe Ala Glu Val Phe Pro Glu His Lys Tyr Gln Val Val Glu Met
          85          90          95
Leu Gln Gln Arg Gly His Leu Thr Ala Val Thr Gly Asp Gly Val Asp
          100          105          110
Asp Ala Pro Ser Leu Lys Lys Ala Asp Cys Gly Met Ala Val Asp Gly
          115          120          125
Ser Thr Glu Ala Ala Gln Ala Ala Ala Asp Ile Val Phe Leu Ala Pro
          130          135          140
Gly Leu Ser Thr Ile Gly Asp Ala Ile Gln Leu Ala Arg Gln Ile Phe
145          150          155          160
Gln Arg Met Lys Ala Tyr Ile Gln Tyr Arg Ile Ala
          165          170

```

&lt;210&gt; 44143

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44143

```

Asp Gln Gly Gln Gly Arg Arg Tyr Gln Gln Arg Pro Gly Gln Pro Gln
1           5           10           15
Trp Asn His Arg Arg Pro Tyr His Ser Gln Leu Ser Ser Glu Arg Glu
           20           25           30
Arg Arg Arg His Arg His Gln Ser Arg Gln Ser Ser Gly His Ala Ala
           35           40           45
Ala Thr Ser Arg Arg Pro Asp Thr Cys Ala Arg Gly Arg Pro Gln Arg
           50           55           60
Asn His Gln Pro Ser Gln Arg Gly Arg Ala Gly Gln Ser Arg Gln Asp
65           70           75           80
His Arg Gly Ser Asp Ala Arg Ser Arg Thr Pro Trp Cys Ser Gly Gln
           85           90           95
Ala Ser Cys Arg Phe Pro Trp Arg Trp Gln Gly His His Gln Ser Thr
           100          105          110
Ser

```

&lt;210&gt; 44144

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2), (4)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44144

```

Leu Xaa Gly Xaa Thr Phe Ala Arg Ile Phe Ala Pro Val Val Lys Arg
1           5           10           15
Tyr Arg Gly Leu Pro Glu Asn Phe Val Glu Arg Tyr Glu Pro Pro Ala
           20           25           30
Pro Pro Arg Pro Thr Arg Pro Ser Arg Pro Lys Lys Glu Ala Asn Ala
           35           40           45
Ala Thr Pro Ser Glu Pro Ala Ala Ala Glu Thr His Val Glu Arg Leu
           50           55           60
Pro Ser Pro Gly Pro Ala Pro Glu Ser Ala Pro Ser Leu Glu Gln Glu
65           70           75           80
Pro Val Leu Glu Pro Pro Arg Ser Pro Pro Ile Ala Val Gln Ala Pro
           85           90           95
Ala Phe Glu Ala Ser Ser Pro Pro Gln Pro Val Glu Ala Gln Ala Pro
           100          105          110
Ile Pro Ala Ala Pro Pro Thr Ala Pro Ser Glu Ser Ser Glu Pro Lys
           115          120          125
Glu Leu Ala Thr Lys Ser Ala Ser Lys Pro Ala Pro Pro Pro Val Ala
           130          135          140
Gln Lys Pro Ser Gly Ser Ser Phe Lys Asp Arg Ile Ala Ala Phe Asn
145          150          155          160
Lys Pro Ala Ala Pro Pro Ile Ala Pro
           165

```

&lt;210&gt; 44145

19948

<211> 62  
<212> PRT  
<213> A.fumigatus

<400> 44145  
Phe Pro Gln Phe Ala Leu Ala Val Ala Pro Ala His Gly Glu Asn Leu  
1 5 10 15  
Cys His Val Thr Ile Leu Phe Asp Leu Val Phe Val Val Gln His Tyr  
20 25 30  
Ile Leu Tyr Arg Asp Ser Met Glu Gly Lys Ile Asp Arg His Pro Asp  
35 40 45  
Leu Val Thr Pro Leu Leu Ser Asp Pro Arg Gly Ala Ser Ala  
50 55 60

<210> 44146  
<211> 130  
<212> PRT  
<213> A.fumigatus

<400> 44146  
Phe Lys Ser Ile Pro Ala Asp Gln Leu Ala Pro Gly Ile Asp Asn Ala  
1 5 10 15  
Gln Lys Phe Thr Ser Val Cys Ile Asn Thr Ala Val Tyr Leu Pro Trp  
20 25 30  
Leu Val Gly Gln Cys Arg Lys Asn Gly Val Val Phe Lys Arg Ala Val  
35 40 45  
Phe Lys His Val Thr Glu Ala Ala Ser Ala His His Ser Gly Lys Lys  
50 55 60  
Ala Asp Val Val Val Asn Cys Thr Gly Leu Ser Ser Lys Lys Leu Gly  
65 70 75 80  
Gly Val Cys Asp Glu Lys Leu Tyr Pro Ala Arg Gly Gln Ile Val Val  
85 90 95  
Val Arg Asn Asp Pro Gly Ala Met Phe Ser Ile Ser Gly Cys Asp Asp  
100 105 110  
Gly Ala His Glu Leu Ser Ser Pro Arg Ala Glu Ile Arg Asp Gly Tyr  
115 120 125  
His Gly  
130

<210> 44147  
<211> 107  
<212> PRT  
<213> A.fumigatus

<400> 44147  
Val Asn Glu Ile Leu Ile Tyr Phe Leu His Leu Gly Ser Thr Ala Ser  
1 5 10 15  
Asp Lys Gln Leu Asn Ser Ile Ile Leu Ile Pro Gly Ile Gly Met Leu  
20 25 30  
Pro Val Arg Glu Trp Ser Ile Leu Leu Arg Gln Trp Thr Ala Phe Phe  
35 40 45  
Asp Ser Thr Glu Ser Arg Val Asn Phe Phe Thr Tyr Asp Tyr Gln Ile  
50 55 60  
Thr Leu Asp Asn Thr Phe Ser Phe Arg Ala Leu Leu Asp Lys Gly His  
65 70 75 80  
Asp Leu Leu Ala Ala Leu Asn Gln His Gln Gln Asn Val Arg Val Phe

## 19949

85
90  
 Ser Asn Ala Glu Cys Leu Arg Trp Gln Arg Gly  
100
105

```
<210> 44148
<211> 213
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<210> 44149
<211> 142
<212> PRT
<213> A.fumigatus
```

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 44149 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ala         | Glu | Thr | Cys | Ala | Gly | Glu | Glu | Met | Val | Gln | Val | Pro | Asp | Asn | Glu |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr         | Arg | Ala | Leu | Arg | Met | Lys | Leu | Leu | Ala | Ala | Ser | Phe | Phe | Ala | Leu |
|             |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Trp         | Ala | Val | Gly | Asp | Ala | Ala | Pro | Ser | Ser | Val | Ser | Asn | Pro | Arg | Val |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg         | Val | Arg | Asn | Gly | Thr | Tyr | Val | Gly | Met | Arg | Asn | Val | Asn | Tyr | Gln |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln         | Asp | Phe | Phe | Leu | Gly | Met | Pro | Tyr | Ala | Gln | Gln | Pro | Val | Gly | Asn |
| 65          |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu         | Arg | Phe | Arg | Val | Pro | Gln | Ser | Leu | Asn | Asp | Ser | Trp | Asp | Gly | Glu |

## 19950

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Arg | Asp | Ala | Lys | Lys | Tyr | Ser | Asp | Ile | Cys | Val | Gly | Tyr | Gly | Val | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gln | His | Leu | Pro | Leu | Trp | Gln | Thr | Ser | Gly | Glu | Leu | Thr | Glu | Ser | Ser |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Thr | Leu | Phe | Gly | Ile | Arg | Cys | Leu | Lys | Leu | Val | Ser | Pro |     |     |
|     |     |     | 130 |     |     | 135 |     |     |     |     | 140 |     |     |     |     |

```
<210> 44150
<211> 82
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<210> 44151
<211> 85
<212> PRT
<213> A.fumigatus
```

[illegible]

```
<210> 44152
<211> 60
<212> PRT
<213> A.fumigatus
```

```

<400> 44152
Leu Phe Phe Ser Phe Gly Glu Ile Val Gly Tyr Leu Glu Arg Gln Tyr
1      5      10
Asp Asp Ile Leu Ala Glu Glu Ser Arg Ile Lys Arg Asn Pro Arg Phe
      20      25      30

```

## 19951

Arg Asp Asn Arg Val His Val Leu Leu Tyr Phe Ile Thr Pro Thr Val  
           35                          40                          45  
 Phe Thr Thr Gly Pro Glu Gly Pro Arg Lys Arg Ile  
       50                          55                          60

<210> 44153  
 <211> 64  
 <212> PRT  
 <213> A.fumigatus

<400> 44153  
 Arg Arg His Leu Gln Ile Gln Leu Thr Arg Leu Pro Gly Thr Asn Pro  
 1                  5                          10                          15  
 Lys Asp Trp Lys Leu Pro Ser Trp Leu Pro Ala Ser Asn Asn Thr Asn  
           20                          25                          30  
 Thr Gly Asp Asp Ile Ala Gly Thr Val Glu Ala Val Gly Asp Asn Val  
       35                          40                          45  
 Phe Gly Phe Ser Lys Gly Asp Arg Val Ala Ala Phe His Val Met Met  
       50                          55                          60

<210> 44154  
 <211> 232  
 <212> PRT  
 <213> A.fumigatus

<400> 44154  
 Thr Ile Thr Ser Ser Arg Arg Leu Glu Ser Val Ser Pro Arg Arg Ile  
 1                  5                          10                          15  
 Leu Met Gly Ile Ala Ser Arg Tyr Ala Ala Ile Ser Phe Pro Leu Val  
           20                          25                          30  
 Ile Leu Ala Val Tyr Ser Ile Gln Lys Val Tyr Leu Arg Thr Ser Arg  
       35                          40                          45  
 Gln Leu Arg Phe Leu Asp Leu Glu Ala Lys Ala Pro Leu Tyr Ser His  
       50                          55                          60  
 Phe Ser Asp Cys Leu Asn Gly Leu Val Thr Leu Arg Ala Phe Gly Trp  
 65                          70                          75                          80  
 Gln Pro Ala Leu Glu Asp Lys Asn Phe Gln Leu Leu Asp Tyr Ser Gln  
           85                          90                          95  
 Arg Pro Phe Tyr Leu Leu Tyr Ala Ile Gln Arg Trp Leu Thr Leu Thr  
           100                          105                          110  
 Leu Asp Met Val Val Ala Ala Ile Ala Val Ile Leu Ile Val Leu Val  
           115                          120                          125  
 Val Thr Leu Arg Gly Thr Ile Ser Ala Arg Asp Val Gly Val Ala Leu  
           130                          135                          140  
 Leu Asn Val Ile Leu Phe Ser Gln Ser Ile Lys Leu Leu Val Thr Phe  
 145                          150                          155                          160  
 Trp Thr Asn Leu Glu Asn His Ile Gly Ser Ile Val Arg Ile Arg Ser  
           165                          170                          175  
 Phe Thr Glu Thr Val Ser Ser Glu Asn Leu Pro Thr Glu Lys Asp Asp  
           180                          185                          190  
 Val Pro Pro Asn Trp Pro Trp Gly Arg Asp Ile Gln Phe Gln Ser Val  
           195                          200                          205  
 Phe Ala Glu Leu Arg Val Ala Asp Cys Leu Arg Ala Phe Asn Thr His  
       210                          215                          220  
 Leu Thr Leu Ile Lys Asp Leu Pro  
 225                          230

## 19952

<210> 44155  
 <211> 111  
 <212> PRT  
 <213> A.fumigatus

<400> 44155  
 Ala Met Ala Thr Ile Thr Gln Val Gln Thr Gln Glu Thr His Thr Val  
 1 5 10 15  
 Leu Pro Lys Ser Leu Thr Val Val Pro Gly Gln Ile Thr Val Lys Glu  
 20 25 30  
 Ile Ser Asn Leu Asp Leu Pro Asp Ile Pro Leu Pro Pro Pro Ser Thr  
 35 40 45  
 Asn Pro Ser Glu Ile Leu Ala Gln Asp Lys Gly Thr Pro Asp Asn His  
 50 55 60  
 Val Pro Arg Asp Pro Arg Leu Ile Arg Leu Thr Gly Val His Pro Phe  
 65 70 75 80  
 Asn Val Glu Pro Pro Leu Thr Ala Leu Phe Asn Glu Gly Ile Val Phe  
 85 90 95  
 Thr Thr Lys Gly Lys Glu Arg Ala Ala Gln Ala Asn Pro Arg Pro  
 100 105 110

<210> 44156  
 <211> 216  
 <212> PRT  
 <213> A.fumigatus

<400> 44156  
 Val Val Leu Tyr Pro Asp Cys Thr His Arg Arg Lys Ser Ser Leu Val  
 1 5 10 15  
 Ser Val Asp Asp Ser Arg Ser Arg Pro His Leu Asp Asn Thr Asp Glu  
 20 25 30  
 Arg Thr Ala Cys Phe Val His Ser Leu Ile Met Gly Glu Trp Ile Ser  
 35 40 45  
 Pro Pro Ser Lys Asp Ile Arg Pro Asp Ala Lys Pro Ser Lys Ala His  
 50 55 60  
 Gly Thr Thr Pro Gln Thr Thr Val Val Asp Asp Asp Ala Ile Lys Pro  
 65 70 75 80  
 Ser Glu Ala Lys Asp Arg Lys Ala Leu Lys Thr Thr Pro Thr Val Val  
 85 90 95  
 Gln Ser Arg His Leu Thr Lys Lys Gln Leu Ser Asp Met Ala Trp Asn  
 100 105 110  
 Val Arg Lys Leu Ser Lys Lys Leu Gly Ser Ile Lys Leu Lys Leu Thr  
 115 120 125  
 Val Lys Ser Val Leu Leu Val Thr Lys Val Arg Asp Glu Ser Leu Val  
 130 135 140  
 Val Leu Thr Arg Lys Val Thr Gln Trp Leu Leu Ser Lys Asp Arg Ser  
 145 150 155 160  
 Thr Lys Tyr Val Val Tyr Val Glu Lys Arg Leu Glu Thr His Arg Asn  
 165 170 175  
 Leu Glu Arg Leu Ser Ser Phe Lys Lys Asn Leu Gln Pro Lys Ala Ala  
 180 185 190  
 Gln Val Leu Gly Cys Lys His Gly Ile Lys Arg Ser Gln Ser Asn Arg  
 195 200 205  
 Leu Arg Ser Tyr Leu Arg Arg Gly  
 210 215



## 19953

<210> 44157  
 <211> 77  
 <212> PRT  
 <213> A.fumigatus

<400> 44157  
 Trp Gly Val Cys Gly Leu Phe Arg Gln Pro Gly Arg Glu Glu Gly Ile  
 1 5 10 15  
 Thr Arg Asn Ile Tyr Leu Ile Ser Val Cys Ser Cys Ser Thr Thr Ser  
 20 25 30  
 Leu Ala Gly Thr Trp Ile Lys His Ser His Gly Leu Lys Asp Gln Lys  
 35 40 45  
 Gln Lys Pro Thr Asn Ser Ile Asn Asn Phe Phe Gly Ala Met Ser Val  
 50 55 60  
 Gln Trp Val Leu Val Pro Ser Leu Asn Leu Gln Gly Ile  
 65 70 75

<210> 44158  
 <211> 71  
 <212> PRT  
 <213> A.fumigatus

<400> 44158  
 Pro Tyr Arg Thr Leu Ala Lys Arg Val Phe Lys Ile Lys Asn Phe Ser  
 1 5 10 15  
 Asp Val Asp Ala Thr Leu Phe Glu Pro Ala Ser Cys Ala Ala His Gly  
 20 25 30  
 Leu Asp Lys Ile Ala Pro Lys Met Gly Ser Ser Val Leu Leu Phe Gly  
 35 40 45  
 Ala Gly Pro Thr Gly Leu Val Cys Gly Phe Arg Ser Gly Ser Cys Asp  
 50 55 60  
 Ile Thr Gly Thr Asp Tyr Val  
 65 70

<210> 44159  
 <211> 117  
 <212> PRT  
 <213> A.fumigatus

<400> 44159  
 Ile Leu Ala Gln Met Leu Arg Leu Asn Gly Gly Cys Lys Val Thr Val  
 1 5 10 15  
 Val Ala Pro Glu Gly Leu Lys Met Asp Leu Ala Lys Asn Leu Gly Ala  
 20 25 30  
 Gly Asp Glu Tyr Val Asp Leu Ser Arg Lys Asp Pro Ser Ala Gln Phe  
 35 40 45  
 Glu Lys Leu Lys Ser Asp Asn Pro Tyr Gly Phe Asp Ile Val Val Glu  
 50 55 60  
 Ala Thr Gly Asn Leu Asn Ile Leu Asn Asp Ser Ile Asn Tyr Val Arg  
 65 70 75 80  
 Arg Gly Gly Lys Leu Val Val Tyr Gly Val Tyr Ala Asn Lys Asp Arg  
 85 90 95  
 Val Ser Trp Pro Pro Ala Lys Ile Cys Glu Phe Phe Phe Pro Leu Leu  
 100 105 110  
 Leu Leu Ser Ala Cys

115

&lt;210&gt; 44160

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2), (4), (8)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44160

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Xaa | Phe | Xaa | Leu | Met | Ala | Xaa | Arg | Thr | Pro | Gly | Glu | Asp | Ile | Met |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Arg | Asp | Lys | Lys | Leu | Tyr | Gly | Glu | Asp | Ala | Glu | Glu | Phe | Lys | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Arg | Trp | Leu | Asp | Ala | Glu | Arg | Ala | Lys | Arg | Tyr | Asn | Lys | Tyr | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Phe | Thr | Phe | Gly | Tyr | Gly | Ala | Arg | Val | Cys | Leu | Gly | Arg | Asp | Ile | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Met | Met | Glu | Leu | Tyr | Lys | Gly | Pro | Leu | Gln | Val | Gly | Thr | Cys | Ile | Pro |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Arg | Phe | Thr | Val | Gly | His | Gln | Cys |     |     |     |     |     |     |     |     |
|     |     |     |     | 85  |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 44161

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44161

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ser | Ser | Ser | Pro | Val | Leu | Ile | Thr | Ile | Met | Lys | Phe | Thr | Ser | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ala | Ser | Gly | Leu | Leu | Ala | Thr | Ala | Ala | Ile | Ala | Ala | Pro | Leu | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Gln | Arg | Leu | Ala | Arg | His | Ala | Arg | Pro | Leu | Ala | Arg | Thr | Ala | Tyr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Ser | Ser | His | Pro | Pro | Tyr | Lys | Pro | Gly | Thr | Ser | Asp | Val | Phe | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ile | Asn | Thr | Thr | Gln | Gly | Arg | Val | Lys | Leu | Gln | Leu | Gly | Trp | Val |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Pro | Ser | Ser |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 44162

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1), (2)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44162

## 19955

Xaa Xaa Glu Leu Lys Phe Arg Val Gln Lys Asp Gly Glu Glu Glu Tyr  
 1 5 10 15  
 Ile Val Arg Ser His Ser Asn Tyr Leu Ile Asn Arg Ser Val Ser Ala  
 20 25 30  
 Glu Val Asn Leu Asp Pro Gly Arg Tyr His Val Leu Val Lys Val Thr  
 35 40 45  
 Ala Tyr Arg Arg Asp Asn Val Glu Ser Thr Glu Glu Val Val Ser Arg  
 50 55 60  
 Leu Ala Pro Ile Lys Arg Glu Lys Leu Val Gln Ile Gly Leu Ser Tyr  
 65 70 75 80  
 Asp Leu Ala His Ala Lys Gly Leu Val Val Glu Thr Glu Gln Glu Lys  
 85 90 95  
 Gln Ala Arg Glu Glu Arg Glu Leu Arg Arg Arg Lys Leu Glu Arg Arg  
 100 105 110  
 Lys Leu Arg Glu Glu Thr Lys Arg Arg Leu Gln Lys Glu Trp Ile Arg  
 115 120 125  
 Glu Arg Lys Met Ala Ala Arg Lys Glu Arg Ala Ala Arg Arg Val  
 130 135 140  
 Ala Met Ser Asn Gly Ser Leu Asn His Lys Gln Pro Asp Lys Gln Ala  
 145 150 155 160  
 Ala Glu Gln Ile Phe Pro Asp Gly Pro Val Gln Ser Pro Ala Asp Leu  
 165 170 175  
 Ala Gly Ala Ser Thr Asn Gly Phe Asp Thr Met Pro Val Pro Asn Ser  
 180 185 190  
 Ser Val Pro Thr Val Phe Thr Arg Gly Gly Arg Ala Cys Tyr Ser Met  
 195 200 205  
 Gln Pro Gly Ser  
 210

&lt;210&gt; 44163

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44163

Gln Thr Pro Glu Ala Leu Pro Gly Phe Trp Ile Phe Met Tyr Arg Val  
 1 5 10 15  
 Ser Pro Phe Thr Tyr Trp Val Gly Gly Met Ala Ala Thr Gln Leu His  
 20 25 30  
 Gly Arg Ala Val Lys Cys Ser Ala Ala Glu Thr Ala Ile Phe Asn Pro  
 35 40 45  
 Pro Ser Gly Leu Thr Cys Gln Glu Tyr Met Ala Asp Tyr Met Ala Val  
 50 55 60  
 Ala Pro Gly His Leu Ser Asn Pro Asn Ala Thr Ser Ser Cys Glu Phe  
 65 70 75 80  
 Cys Ser Leu Ser Val Ala Asp Gln Tyr Leu Ala Ser Val Asn Ile Tyr  
 85 90 95  
 Trp Ser Glu Arg Trp Arg Asn Phe Gly Ile Phe Trp Ala Tyr Val Val  
 100 105 110  
 Phe Asp Ile Ala Val Ala Val Met Leu Tyr Tyr Cys Phe Arg Val Lys  
 115 120 125  
 Lys Trp Asn Phe Ser Phe Gly Lys Arg Lys Lys Ser Lys Ala Ala  
 130 135 140

&lt;210&gt; 44164

&lt;211&gt; 127

19956

<212> PRT

<213> A.fumigatus

<400> 44164

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Phe | Val | Cys | Ser | Leu | Cys | Ser | Arg | Arg | Phe | Cys | Arg | Gln | Glu | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Lys | Arg | His | Tyr | Arg | Ser | Leu | His | Thr | Gln | Asp | Lys | Pro | Phe | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Cys | His | Glu | Cys | Gly | Lys | Lys | Phe | Ser | Arg | Ser | Asp | Asn | Leu | Ala | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Ala | Arg | Thr | His | Gly | Gly | Gly | Ser | Ile | Val | Met | Gly | Val | Ile | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Asn | Ser | Ser | Asn | Thr | Gln | Pro | Ala | Phe | Asp | Glu | Pro | Glu | Pro | Arg |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Leu | Gly | Leu | Ala | Leu | Tyr | Glu | Ala | Ala | Asn | Ala | Ala | Thr | Ser | Lys |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Thr | Thr | Ser | Glu | Ser | Ser | Asp | Gly | Thr | Ile | Ser | Asp | Thr | Ser | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Gly | Gly | Arg | Pro | Ala | Lys | Lys | Arg | Arg | Arg | Asp | Asp | His | Val |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

<210> 44165

<211> 156

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (5)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44165

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Pro | Asn | Leu | Xaa | Arg | Ser | Ser | Pro | Leu | Val | Gly | Arg | Thr | His | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Cys | His | Met | Gln | Arg | Phe | Gly | Ala | Leu | Asn | Asn | Ala | Ile | Ile | Asp | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Glu | Glu | Phe | Gly | Leu | Val | Ala | Phe | Glu | Thr | Leu | Ala | Val | Glu | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Lys | Ser | Met | Met | Asn | Leu | Leu | Arg | Val | Ile | Asp | Arg | Ala | Ser | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Tyr | Ala | Phe | Gly | Pro | Ala | Glu | Gly | Ala | Asn | Asp | Thr | Ile | Trp | Gln | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ala | Val | Arg | Glu | Gly | Leu | Gly | Thr | Met | Asp | Ile | Arg | Asp | Val | Gln | Glu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Trp | Leu | Asp | Ala | Lys | Asp | Glu | Tyr | Asp | Ala | Gln | Glu | Arg | Ser | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Glu | Ala | Glu | Ala | Lys | Ala | Arg | Glu | Gln | Ala | Ala | Gln | Pro | Pro | Pro |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Arg | Glu | Asp | Asp | Glu | Leu | Asp | Ala | Asp | Leu | Ala | Asn | Phe | Arg | Gly | Ser |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Pro | Asp | Ser | Gly | Val | Lys | Val | Ile | Arg | Lys | Ser |     |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     |

<210> 44166

<211> 83

<212> PRT

# 19957

<213> A.fumigatus

<400> 44166

```

Ser Ser Ser Ser Ser Leu Pro Ile Ser Arg Ser Ser Ser Ser Ile Thr
1          5          10          15
Ser Arg Thr Glu Ala Ala Ala Asn Leu Pro Thr Ala Ala Ala Ser Leu
          20          25          30
Ser Ser Asn Pro Pro Thr Asn Pro Ser Lys Thr Pro Ile Ser Ser Ala
          35          40          45
Pro Phe Ser Arg Asp Ile Ser Leu Arg Ala Pro Arg Ile Ala Ser Ser
          50          55          60
Ser Thr Ser Phe Ile Val Pro Asp Thr Phe Leu Tyr Pro Asn His Pro
65          70          75          80
Gln Ser Leu

```

<210> 44167

<211> 145

<212> PRT

<213> A.fumigatus

<400> 44167

```

Thr Met Lys Asp Ser Asn His Asp Phe Arg Ile Thr Phe Thr Pro Leu
1          5          10          15
Ser Gly Ser Glu Pro Leu Lys Phe Ala Lys Ser Ala Ser Ser Ser Ser
          20          25          30
Ser Ser Leu Gly Gly Gly Cys Ala Ala Cys Ser Leu Ala Phe Ala Ser
          35          40          45
Ala Ser Ser Ser Leu Arg Ser Cys Ala Ser Tyr Ser Ser Phe Ala Ser
          50          55          60
Ser His Arg Ser Trp Thr Ser Arg Ile Ser Met Val Pro Ser Pro Ser
65          70          75          80
Arg Thr Ala Thr Cys Gln Met Val Ser Phe Ala Pro Ser Ala Gly Pro
          85          90          95
Asn Ala Tyr Pro Leu Ala Leu Ser Ile Thr Arg Asn Lys Phe Ile Met
          100          105          110
Leu Phe Leu Ser Ser Thr Ala Ser Val Ser Asn Ala Thr Ser Pro Asn
          115          120          125
Ser Ser Thr Arg Ser Met Met Ala Leu Leu Arg Ala Pro Asn Leu Cys
          130          135          140
Met
145

```

<210> 44168

<211> 94

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (4)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44168

```

Ser Thr Cys Xaa Ile Glu Arg Pro Leu Gln Pro Ala Val Lys Thr His
1          5          10          15

```

# 19958

```

Asn Asn His Ser Leu Ser Asn Phe Lys Asn Pro Ser Gln Arg Asp Pro
      20      25      30
Leu Val Glu Ala Arg Ser Thr Ile Arg Lys Asn Ser Ala Ser Ala Pro
      35      40      45
Val Arg Arg Arg Ile Ser Arg Ala Cys Asp Gln Cys Asn Gln Leu Arg
      50      55      60
Thr Lys Cys Asp Gly Gln Asn Pro Cys Ala His Cys Ile Gly Arg Val
65      70      75      80
Pro Asn Ser Tyr Pro Asn Phe Val Leu Arg Asn Val Pro Tyr
      85      90

```

<210> 44169  
 <211> 147  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44169
His Gly Asn Tyr Tyr Pro Tyr Lys Tyr Asp Leu Gly Arg Phe Asn Thr
1      5      10      15
Ile Gly Ser Ile Ser Phe Asp His Pro Asp Pro Ser Ile Phe Thr Val
      20      25      30
Leu Thr Gly Pro Ser Asp His Ala Gly Thr Ala Ile Ala Asp Phe Val
      35      40      45
Ile Phe Pro Pro Arg Trp Leu Val Ala Glu Asn Thr Phe Arg Pro Pro
      50      55      60
Trp Tyr His Arg Asn Thr Met Ser Glu Phe Met Gly Leu Ile Cys Gly
65      70      75      80
Asn Tyr Asp Ala Lys Thr Gly Gly Gly Phe Gln Pro Ala Gly Ala Ser
      85      90      95
Leu His Asn Val Met Ser Ala His Gly Pro Asp Ala Asp Ala Phe Glu
      100      105      110
Gly Ala Ser Asn Ala Glu Leu Lys Pro Gln Lys Val Gly Asp Gly Ser
      115      120      125
Met Ala Phe Met Phe Glu Arg Tyr Val Val Leu Arg Tyr Ile Glu Arg
      130      135      140
Phe Lys Tyr
145

```

<210> 44170  
 <211> 209  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (44)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 44170
Thr Ser Ser Lys Phe Glu Glu Val Pro Trp Val Trp Ser His Ser Gly
1      5      10      15
Asn Asp Leu Gly Asn Leu Met Lys Ile Met Leu Cys Lys Pro Leu Pro
      20      25      30
Glu Asn Glu Glu Asp Phe His Thr Leu Leu Lys Xaa Phe Phe Arg Ser
      35      40      45
Leu Tyr Asp Ile Lys Tyr Leu Met Lys His Ala Gly Arg Asn Gln Ala

```

## 19959

|   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |     |
| Val Asn Asp Ser Pro Leu Thr Pro Ala Ala Ala Gln Ile Leu Thr Asn |     |     |     |     |     |
| 65  |     | 70  |     | 75  | 80  |
| Leu Gly Gln Lys Ser Gly Leu Gln Asp Ile Ala Asp Glu Leu Gly Val |     |     |     |     |     |
|   | 85  |     | 90  |     | 95  |
| Lys Arg Val Gly Ile Ala His Gln Ala Gly Ser Asp Ser Leu Val Thr |     |     |     |     |     |
|   | 100 |     | 105 |     | 110 |
| Gly Glu Ile Tyr Trp Lys Met Arg Gln Leu Ile Phe Asn Gly Lys Ile |     |     |     |     |     |
|   | 115 |     | 120 |     | 125 |
| Asp Glu Gly Lys Tyr Ser Gly Gln Ile Trp Gly Leu Asn Gly Gln Met |     |     |     |     |     |
|   | 130 |     | 135 |     | 140 |
| Pro Ala Met Thr Tyr His Met Gln Pro His Gln Thr Pro Asn Leu Asn |     |     |     |     |     |
| 145   |     | 150 |     | 155 | 160 |
| Gly Ala Thr Ile Tyr Ser Ala Ala Gly Thr Pro Ser Thr Pro Asn Thr |     |     |     |     |     |
|   | 165 |     | 170 |     | 175 |
| Gly Arg Gln Thr Pro Gln His His Gly Asn Ile Gly Gly Ala Leu     |     |     |     |     |     |
|   | 180 |     | 185 |     | 190 |
| Thr Pro Gly Gly Pro Gly Gly Val Met Gly Ala Phe Gln Thr Gly Lys |     |     |     |     |     |
|   | 195 |     | 200 |     | 205 |
| Ala   |     |     |     |     |     |

&lt;210&gt; 44171

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (55)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44171

|   |    |
|---|----|
| Asn Arg Ala Ala Gly Ala Asn Lys His Trp Val Ile Ala Thr Val Leu |    |
| 1   | 15 |
| Ala Gly Ala Pro Ala Glu Asp Tyr Pro Pro Ser Arg Thr Val Tyr Ala |    |
|   | 20 |
| Trp Lys Gly Thr Ser Thr Val Ile Leu Ala Val Leu Gly Asn Glu Arg |    |
|   | 35 |
| Ala Phe Pro Thr Gln Val Xaa Ile Gly Arg Arg Ala Glu Asp Pro Arg |    |
|   | 50 |
| Asn Arg   | 60 |
| 65  |    |

&lt;210&gt; 44172

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (12)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44172

Trp Tyr Phe His Thr Thr Ala Met Phe Glu Gly Xaa Pro His Arg Glu

## 19960

```

1           5           10           15
His Val Pro Ile Phe Lys Ala Tyr Tyr Leu Leu Gln Ala Ser Tyr Trp
           20           25           30
Ala Gln Gln Ala Ile Val Leu Leu Leu Gln Leu Glu Lys Pro Arg Lys
           35           40           45
Asp Phe Lys Glu Leu Val Gly His His Ile Ile Thr Leu Ala Leu Ile
           50           55           60
Gly Leu Ser Tyr Arg Phe His Phe Thr Tyr Met Gly Ile Ala Val Tyr
65           70           75           80
Ile Thr His Asp Ile Ser Asp Phe Phe Leu Ala Val Cys Leu Gln Gly
           85           90           95
Phe Phe Leu Leu Glu Arg Glu Leu Thr Asp Ala Ser Cys Arg Pro Gln
           100          105          110
Lys Pro Ser Thr Thr Trp Thr Pro Ser Ser Leu Tyr His Thr Leu Ala
           115          120          125
Pro Ser Ser Leu Cys Gly Ser Thr Ser Ala Ile Ser Ser Thr
           130          135          140

```

&lt;210&gt; 44173

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (123), (124)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44173

```

Thr Ser Lys Thr Leu Asn Tyr Leu Asp Ser Ile Ile Thr Val Pro Tyr
1           5           10           15
Phe Gly Thr Phe Val Leu Met Trp Ile Tyr Leu Arg His Phe Leu Asn
           20           25           30
Leu Lys Ile Leu Trp Ala Val Leu Thr Glu Phe Arg Thr Val Gly Pro
           35           40           45
Tyr Glu Leu Asn Trp Glu Thr Gln Gln Tyr Lys Cys Trp Ile Ser Gln
           50           55           60
Ile Ile Thr Phe Val Leu Leu Ala Ser Leu Gln Ala Val Asn Leu Phe
65           70           75           80
Trp Leu Phe Leu Ile Leu Arg Ile Leu Lys Asn Tyr Ile Phe Asn Ser
           85           90           95
Val Lys Lys Asp Glu Arg Ser Asp Asp Glu Thr Glu Glu Glu Leu Glu
           100          105          110
His Glu Ala Glu Ser Arg Gly Thr Leu Ala Xaa Xaa Val Gln Arg Ser
           115          120          125
Arg Ile Arg Glu
           130

```

&lt;210&gt; 44174

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (10)



19961

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44174

```

Pro Cys Trp Cys Trp Pro Cys Gly Glu Xaa Phe Pro Glu Pro Glu Asp
1           5           10           15
Leu Lys Glu Ile Pro Gln Lys Val Asp Gly Ala Glu Phe Leu Val Asn
           20           25           30
Leu Ile Asp Ser Pro Gly His Val Asp Phe Ser Ser Glu Val Thr Ala
           35           40           45
Ala Leu Arg Val Thr Asp Gly Ala Leu Val Val Val Asp Cys Val Glu
           50           55           60
Gly Val Cys Val Gln Thr Glu Thr Val Leu Arg Gln Ala Leu Thr Glu
65           70           75           80
Arg Ile Lys Pro Val Leu Ile Ile Asn Lys Val Asp Arg Ala Leu Leu
           85           90           95
Glu Leu Gln Val Ser Lys Glu Asp Leu Tyr Gln Ser Phe Ser Arg Thr
           100          105          110
Val Glu Ser Val Asn Val Ile Ile Ala Thr Tyr His Asp Lys Ala Leu
           115          120          125
Gly Asp Val Gln Val Tyr Pro Asp Arg Gly Thr Val Ala Phe Gly Ser
           130          135          140
Gly Leu His Gly Trp Ala Phe Thr Val Arg Gln Phe Ala Val Lys Tyr
145           150           155           160
Ala Lys Lys Phe Gly Val Asp Arg Lys Lys Met Leu Glu Arg Leu Trp
           165           170           175
Val Ser Gly Thr Tyr Leu Phe Pro Gly Arg Lys Ile
           180           185

```

<210> 44175

<211> 192

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (183)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44175

```

Ala Ser Trp Leu Tyr Phe Pro Ser Gly Lys Lys Ile Cys Ser Thr His
1           5           10           15
Pro Glu Thr Leu Lys His Leu Leu Thr Val Asn Thr Glu Leu Leu Gly
           20           25           30
Val Leu Asp Ser Glu Leu Ala Asp Gly Glu Ser Pro Ser Val Glu Thr
           35           40           45
Gly Thr Glu Ser Asn Gly Thr Ala Val Gly Val Asp Leu Asn Ile Thr
           50           55           60
Lys Ser Leu Val Val Val Gly Gly Asp Asp Asp Val Asn Gly Leu Asn
65           70           75           80
Gly Thr Arg Glu Gly Leu Val Glu Ile Leu Leu Gly Asn Leu Lys Phe
           85           90           95
Glu Gln Ser Thr Val Asp Leu Val Asp Asp Gln Asp Arg Leu Asp Thr
           100          105          110
Leu Gly Gln Gly Leu Thr Gln Asp Gly Leu Gly Leu Asp Thr Asp Thr
           115          120          125
Leu Asn Ala Val Asp Asp Asp Gln Gly Thr Val Ser Asp Thr Glu Ser

```

## 19962

|   |                         |                     |     |     |
|---|-------------------------|---------------------|-----|-----|
| 130   |                         | 135                 |     | 140 |
| Gly Ser Asp Leu Arg   | Gly Glu Val Asn Val Thr | Gly Gly Ile Asp Gln |     |     |
| 145   | 150                     | 155                 | 160 |     |
| Val Asp Gln Glu Leu Ser Thr Ile Asp Leu Leu Gly Asp Phe Leu Lys |                         |                     |     |     |
|   | 165                     | 170                 | 175 |     |
| Ile Leu Arg Leu Trp Glu Xaa Phe Ser Thr Arg Pro Ala Pro Ala Arg |                         |                     |     |     |
| 180   | 185                     | 190                 |     |     |

<210> 44176  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<400> 44176

|   |          |
|---|----------|
| Phe Leu Ser Val Ala Ser Ile Val Val Phe Cys Gly Asp Tyr Ala Ser |          |
| 1   | 5 10 15  |
| Val Ser Tyr Leu Phe Leu Ser Ser Gly Ala Ser Cys Pro Asn Phe Glu |          |
|   | 20 25 30 |
| Phe Val Asp Leu Leu Val Pro Glu Ala Ser Ala Gly Thr Cys Tyr Leu |          |
|   | 35 40 45 |
| His Asn Gln Thr Arg Glu Cys Pro Leu Arg Gln Cys Leu Arg Gln Lys |          |
|   | 50 55 60 |
| Ala Ile Pro Ile Pro Ile Asn Ser Ala Arg                         |          |
| 65  | 70       |

<210> 44177  
 <211> 118  
 <212> PRT  
 <213> A.fumigatus

<400> 44177

|   |             |
|---|-------------|
| Leu Ser Gln Ser Leu Pro Ile Arg Val Phe Leu Leu Ser Asn Phe Val |             |
| 1   | 5 10 15     |
| Lys Asp Ser Asp Ser Pro Tyr Leu Lys Cys Arg Val Pro Leu Asp Ile |             |
|   | 20 25 30    |
| Leu Lys Thr Ala Leu Thr Pro Leu Gly Asp Phe Pro His Lys Asn Glu |             |
|   | 35 40 45    |
| Ala Val Gln Phe His Asn Pro Ile Leu Phe Ile Arg Ala Leu Arg Ser |             |
|   | 50 55 60    |
| His Tyr Ile Pro Glu Ala Ser Ile Pro Leu Ile Ser Ser Phe Phe Pro |             |
| 65  | 70 75 80    |
| Gln Ser Arg Ile Val Asn Ile Asp Cys Gly His Trp Val Val Gln Glu |             |
|   | 85 90 95    |
| Arg Pro Glu Glu Leu Arg Ser Gly Asp Val Ser Ile Ala Tyr Phe Leu |             |
|   | 100 105 110 |
| Ile Leu Lys Tyr Val Cys   |             |
| 115   |             |

<210> 44178  
 <211> 125  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (79)

## 19963

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44178

```

Pro Asn Gln Ser Ile Glu Thr Ser Pro Thr Thr Pro Ala Pro Ser Pro
1          5          10          15
Ala Pro Ser Ala Ala Pro Ser Glu Thr Asn Ala Ala Ser Gln Ser Gly
          20          25          30
Ser Pro Ala Ser Pro Pro Arg Val Asn Pro Pro Ser Pro Val Asn Ser
          35          40          45
Ser Asn Ser Cys Ser Ala Thr Gly Ala Ser Pro Pro Tyr Arg Leu Asp
          50          55          60
Gly Asp Asn Ile Arg Phe Gly Leu His Lys Asp Leu Gly Phe Xaa Arg
65          70          75          80
Lys Gly Thr Gln Arg Glu Leu Ser Gly Ala Leu Ala Glu Val Pro Gln
          85          90          95
Leu Leu Pro Arg Lys Ala Pro Asn Ile Ala Asn His Val Leu Leu Ser
          100          105          110
Ser Pro Val Asn Lys Ala Glu Pro Ala Lys Asn Ala Arg
          115          120          125

```

<210> 44179

<211> 197

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (158)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44179

```

Lys Trp His His Leu Phe Phe Leu Arg Cys Ser Ile Val Met Ile Ser
1          5          10          15
His Arg Ile His Pro Ala Ile Ser Ala Pro Leu Leu Tyr Gln Leu Phe
          20          25          30
Arg Pro Phe Leu His Thr Ser Ile Leu His Pro Ser Ala Ser His Thr
          35          40          45
Ile Thr Phe Ser Glu Thr Asn Ile Gln Lys Ala Gln Ser Gln Trp Pro
          50          55          60
Arg Thr Asp Pro Ser Pro Pro His Ser Ser Ser Glu Pro Ala Leu Thr
65          70          75          80
Gln Pro Ile Tyr Arg Asn Ile Thr Tyr His Ala Ser Ala Leu Thr Arg
          85          90          95
Ser Glu Arg Ser Ala Leu Arg Asn Gln Arg Gly Leu Thr Ile Trp Leu
          100          105          110
Thr Gly Leu Ser Ala Ser Gly Lys Ser Thr Ile Ala Gly Gln Leu Glu
          115          120          125
Gln Gln Leu Leu Arg Asp Arg Gly Val Ser Ala Leu Pro Thr Arg Arg
          130          135          140
Arg Gln His Pro Leu Arg Ala Pro Gln Gly Pro Arg Phe Xaa Pro Lys
145          150          155          160
Arg Asn Ala Thr Arg Thr Phe Arg Gly Ile Gly Gly Ser Thr Pro Ala
          165          170          175
Ser Ser Pro Lys Ser Ala Lys His Arg Gln Ser Arg Pro Phe Ile Leu
          180          185          190
Ala Arg Lys Gln Gly

```

195

&lt;210&gt; 44180

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (55)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44180

```

Ser Ile Pro Leu Ser Gly Ile Ser Asp Ile Pro Phe Met Arg Asn Ser
1           5           10           15
Arg Arg Gly Phe Arg Ser Gly Thr Phe Leu Gln Val His Tyr Gly Gln
          20           25           30
Gly His Pro Val Ile Arg Leu Gly Pro Asn Ala Leu Ser Phe Ala Gly
          35           40           45
Gly Gln Ala Ile Pro Ala Xaa Tyr Gly His Asp Thr Pro Ala Thr Lys
          50           55           60
Asp Arg Gln Tyr Leu Asn Ala Ala Gly Ser His Phe His Leu Ala Asp
65           70           75           80
Val Val Asp Lys Lys Glu His Ala Arg Lys Arg Lys Val Leu Ala Ser
          85           90           95
Ala Phe Ala Ala Thr His Leu Glu Asp Trp Glu Tyr Lys Val Ala Asp
          100          105          110
Lys Val Gln Arg Leu Met Gln Arg Phe Asp Gln His Leu Ala Gln Met
          115          120          125
Pro Asp Asp Pro Leu Asp Tyr Arg Ser Trp Thr Asn Leu Phe Thr Ile
          130          135          140
Asp Ser Leu Cys Asp Thr Leu Ile Val Ala Pro Thr Val
145           150           155

```

&lt;210&gt; 44181

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44181

```

Thr Asp Asp Asn Asn Ser Glu Asp Gln Thr Asn Glu Lys Val Arg Lys
1           5           10           15
Val Leu Ser Gly Leu Ser Lys Ser Thr Leu Val Val Ala Pro Leu Ala
          20           25           30
Leu Ile Lys Gln Trp Glu Ser Glu Ile Ala Thr Lys Ile Glu Asp Ser
          35           40           45
His Lys Leu Arg Val Cys Val Tyr His Gly Asn Thr Arg Ala Lys Ala
          50           55           60
Thr Asp Ser Leu Asp Thr Tyr Asp Val Val Ile Thr Thr Tyr Gly Thr
65           70           75           80
Leu Thr Ser Glu Tyr Gly Ala Val Asp Lys Asn Lys Lys Lys Ala Gly
          85           90           95
Leu Phe Ser Val Tyr Trp Tyr Arg Ile Val Leu Asp Glu Ala His Thr
          100          105          110
Ile Lys Asn Arg Asn Ala Lys Ala Thr Gln Ser Ala Cys Ala Leu Asp
          115          120          125

```

# 19965

Ala Glu Tyr Arg Trp Cys Leu Ser Gly Thr Pro Met Gln Asn Asn Leu  
 130 135 140  
 Asp Glu Leu Gln Ser Leu Ile Lys Phe Leu Arg Ile Lys Pro Tyr Asn  
 145 150 155 160  
 Asp Leu Ala Ala Trp Lys Asp Gln Ile Thr Arg Pro Leu Ser Asn Gly  
 165 170 175  
 His Ala Pro Leu Arg Phe Phe Ser Thr Gly Arg Asp Pro Leu Trp  
 180 185 190

<210> 44182  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<400> 44182  
 Ser Tyr Ile Tyr Ala Pro Ser Thr Cys Pro Leu Thr Leu Thr Ser Arg  
 1 5 10 15  
 Tyr Asn Gln Leu Pro Cys Pro Ser Tyr Leu Phe Ser Leu Thr Cys Leu  
 20 25 30  
 Leu Ile Leu Pro Asn Met Glu Leu Ser Ala Gly Ser Ser Ser Lys Ala  
 35 40 45  
 Thr Gln Ser Thr Thr Ser Gln Ala Ser Phe Asn Ser Gly Asp Val Thr  
 50 55 60  
 Leu Trp Val Phe Val Ala Leu Glu Arg Pro Ser Arg Ser Ser Arg  
 65 70 75

<210> 44183  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 44183  
 Gly Ser Glu Ser Arg His Val Arg Ser Thr Leu Ser Val Lys Asn Val  
 1 5 10 15  
 Phe Thr Ile Pro Tyr Ser Arg Lys Met Arg Ser Ser Gln Lys Ser Asn  
 20 25 30  
 Pro Val Leu Val Arg Leu His His Asn Gly Ser Thr Pro Leu Gly Ser  
 35 40 45  
 His Thr Phe Thr His Leu Pro Leu Val Pro Leu Leu  
 50 55 60

<210> 44184  
 <211> 79  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (42)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44184  
 Gly Lys Phe Arg Glu Tyr Leu Glu Arg Thr Thr Tyr Ile Asn Gln Val  
 1 5 10 15  
 Leu Gly Thr Gly Tyr Ala Pro Leu Gln Gly Phe Ser Ser Asn Leu Tyr  
 20 25 30

## 19966

Arg Pro Tyr Gln Gly Arg Ala Gly Gly Xaa Lys Ser Gly Val Leu Val  
           35                          40                          45  
 Arg Gln Arg Leu Glu Arg Glu Gly Leu Ser Ser Ala Thr Lys Thr His  
       50                          55                          60  
 Asn Val Thr Ser Pro Glu Leu Asn Asp Ala Trp Glu Val Val Asp  
 65                          70                          75

<210> 44185  
 <211> 109  
 <212> PRT  
 <213> A.fumigatus

<400> 44185  
 Leu Asp Ala Gly Tyr Val Glu Asp Leu Ser Lys Gly Lys Met Leu Arg  
 1                          5                          10                          15  
 Phe Glu Glu Ser Leu Pro Arg Leu Pro Val Pro Ser Leu Glu Glu Thr  
           20                          25                          30  
 Gly Arg Arg Tyr Leu Lys Ser Val His Ala Val Val Ser Glu Ala Glu  
       35                          40                          45  
 Tyr Glu Arg Thr Lys Lys Ala Val Glu Ala Phe Ile Arg Pro Gly Gly  
       50                          55                          60  
 Glu Gly Gln Pro Leu Gln Glu Arg Leu Leu Ala Arg Ala Ala Asp Pro  
 65                          70                          75                          80  
 Lys Tyr Lys Lys Trp Leu Thr Glu Trp Trp Asn His Ala Ala Tyr Leu  
           85                          90                          95  
 Gly Tyr Arg Gly Pro Val Ile Pro Tyr Val Ser Tyr Phe  
           100                          105

<210> 44186  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 44186  
 Val Leu Cys Tyr Thr His Ala Ser Ile Lys Ser Ile Val Tyr Met Ile  
 1                          5                          10                          15  
 Leu Ile Ile Ser Gln Trp Arg Asn Asn Pro Lys Ile Gly Gln Lys Ser  
       20                          25                          30  
 Ser Ala Ser Tyr Val Arg Ser Thr Ser Thr Ser Ser Arg Leu Leu Thr  
       35                          40                          45  
 Phe Trp Ile Ile Cys His Arg Val Val His Pro Thr Pro Lys Leu Glu  
       50                          55                          60  
 Ile Leu Asn Ser Arg Lys Ser Ser  
 65                          70

<210> 44187  
 <211> 189  
 <212> PRT  
 <213> A.fumigatus

<400> 44187  
 Gly Ala Pro Ser Leu Trp Leu Thr Val Leu Met Ser Val Arg Leu Val  
 1                          5                          10                          15  
 Phe Gln Asn Phe Pro Thr Arg Ser Arg Lys Ser Asp Arg His Thr Pro  
       20                          25                          30  
 Pro Arg Leu Asp Ser Leu Tyr Lys Gln Met Met Gln Glu Ile Arg Lys

## 19967

```

      35              40              45
Ser Glu His Glu Pro Cys Arg Glu Ile Leu Asn Leu Ile Thr Ala
 50              55              60
Ile Tyr His Pro Ile Met Leu Gln Glu Leu Ala Ser Ile Arg Glu Ile
65              70              75              80
Leu Ala Glu Tyr Pro Asn Asn Ala Lys Ser Leu Lys Glu Ala Ile Arg
      85              90              95
Leu Cys Gly Ser Leu Thr Ile His Lys Gly Thr Ala Phe Phe Val Ser
      100              105              110
Ala Lys Asp Tyr Leu Thr Gly Ile Val Ser Gln Glu Leu Phe Leu Ser
      115              120              125
Gly Ile Glu Ser Val His His Thr Ile Phe Leu Arg Ser Leu Ser Ser
      130              135              140
Met Glu Leu Thr Leu His His Asp Leu Tyr Ser Leu Arg Asn Pro Gly
145              150              155              160
Phe Pro Ile Asn Lys Val Arg Arg Pro Glu Pro Arg Ser Thr Lys Cys
      165              170              175
Cys Val Ile Leu Met His Leu Leu Ser Gln Ser Phe Thr
      180              185

```

&lt;210&gt; 44188

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44188

```

Trp Val Ser Leu Ala Ile Met Leu Ala Asp Ser Leu Val Ser Leu Gly
1              5              10              15
Trp Leu Val Leu Lys Pro Val Ile Ala Asn Ala Pro Arg Leu Lys Ala
      20              25              30
Arg Phe Phe Ser Ser Arg Ala Gly Asn Trp Ile Leu Ala Gln Ala Ser
      35              40              45
Asn Asn Gly Ser Arg His Ser Tyr Val Arg Tyr Ser Ala Leu Ser Pro
      50              55              60
Ile Ser Glu Glu Ser Ser Thr Ala Ala Tyr Ser Thr His Leu Pro Ala
65              70              75              80
Arg His Gly Glu Pro Glu Glu Glu Asp Asp Ala Pro Pro Ser Gln Leu
      85              90              95
Ile Ser Thr Arg Thr Val Val Ile Leu Leu Pro Leu Thr Leu Met Leu
      100              105              110
Asn Val Val Cys Met His Ile Val Phe Gly Asp Val Met Ser Pro Leu
      115              120              125
Leu Ser Ser Leu Ala Thr Leu Leu Ala Val Leu Leu Ser Ile Met Gly
      130              135              140
Val Arg Ala Leu Gly Glu Thr Asp Leu Asn Pro Val Ser Gly Ile Ser
145              150              155              160
Lys Leu Thr Gln Leu Leu Phe Ser Leu Ala Thr Pro Gly Leu His His
      165              170              175
Ala Ala Glu Arg Lys Glu Ala
      180

```

&lt;210&gt; 44189

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19968

<400> 44189

```

Ser Cys Arg Val Ala Arg Gln Ala Leu Lys Arg Glu Arg Asp Ser Ser
1          5          10          15
Ser Cys Asp Ser Thr Ala Gln Cys Ala Ile Ser Gln Glu Ser Val Trp
          20          25          30
Ile Asp Asn Gly Tyr Asp Leu Asn Pro Gly Ser Ser Cys Gln Arg Asn
          35          40          45
Tyr Glu Ser Thr Arg Asn Ser Ala Ser Ile Met Ala Cys Val Arg Ser
          50          55          60
Leu Gly Leu His Glu Pro Ser Ala Leu Pro Phe Leu Val Ala Glu Asp
65          70          75          80
Leu Leu Pro Pro Asp Pro Ser Glu Asn Gln Tyr Glu Trp Ser Thr Thr
          85          90          95
Val Asp Glu Cys Pro Asn Gly Leu Val Asp Asp Glu Leu Val Trp Thr
          100          105          110
Thr Ser Cys Val
          115

```

<210> 44190

<211> 179

<212> PRT

<213> A.fumigatus

<400> 44190

```

His Tyr Met Thr Ala Gln Asn Glu Ile Glu Asn Ala Ile Ala Glu Ser
1          5          10          15
Gln Leu Cys Ile Asn Ala Phe Val Gly Pro Val Phe Ala Val Asp Phe
          20          25          30
Cys Tyr Val Asp Glu Asp Ser His Asn Leu Leu Ser Leu Val Ala His
          35          40          45
His Leu Val Val Asp Ile Val Ser Trp Arg Ile Ile Leu Glu Asp Leu
          50          55          60
Glu Asp Phe Leu Leu Asn Pro Gln Gly Phe Val Leu Gln Asn Ser Ser
65          70          75          80
Leu Pro Phe Gln Thr Trp Cys Arg Leu Gln Asp Glu Gln Cys Glu Ser
          85          90          95
Val Ala Phe Glu Asn Asp Val Gln Leu Glu Asp Leu Pro Ala Pro Asp
          100          105          110
Leu Ala Tyr Trp Gly Met Glu His Arg Gln Met Thr Tyr Gly Asp Val
          115          120          125
Ile Cys Glu Thr Phe Glu Leu Asp Pro Gly Ser Thr Gln Ser Ile Leu
          130          135          140
Leu Glu Cys His Gln Ser Val Arg Thr Glu Pro Val Asp Leu Phe Leu
145          150          155          160
Ala Ala Leu Val His Ser Phe Gly Gln Thr Phe Gly Arg Ala Tyr Arg
          165          170          175
Ala Ser Cys

```

<210> 44191

<211> 171

<212> PRT

<213> A.fumigatus

<400> 44191

```

Ile Val Val Gly Val Thr Lys Ala Val Ser Asp Cys Phe Gly Ser Gly

```



## 19969

```

1           5           10           15
Gly Ile Ala Asp Arg Met Ile Trp Ser Asn Gly Phe Pro Phe Val Asp
                20           25           30
Asn Lys Glu Glu His Val Phe Asn Val Pro Val Ser Gln Ala Met Thr
                35           40           45
Pro Asp Pro Val Ser Leu Pro Ala Ala Asp Phe Pro Val Arg Glu Ala
                50           55           60
Glu His Leu Leu Asn Asp Asn Lys Phe Gln Gly Phe Pro Ile Val Glu
65           70           75           80
Asp Arg Ser Ser Lys Val Leu Ile Gly Tyr Ile Gly Arg Thr Glu Leu
                85           90           95
Arg Tyr Ala Ile Asp Arg Ala Lys Ser Glu Gly Ile Leu Ala Pro Asn
                100          105          110
Ala Arg Cys Val Phe Thr Lys Glu Ala Ala Glu Ala Val Ala Arg
                115          120          125
Arg Ala Ser Val Ser Arg Asn Gln Leu Val Pro Asn Thr Phe Asp Ala
130          135          140
Ile Gln Thr Ser Leu Gly Ala Pro Phe Val Asp Phe Ser Arg Val Phe
145          150          155          160
Thr Thr Gly Ala Asp Gly Cys Ala Ile Gly Val
                165          170

```

&lt;210&gt; 44192

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44192

```

Lys Ser Ser Arg Trp Ser Ala Leu Leu Pro Ala Leu Xaa Thr Leu Asp
1           5           10           15
Ile Val Gly Ala Val Leu Phe Ile Phe Gly Val Gly Leu Ile Ile Leu
                20           25           30
Gly Thr Ala Trp Gly Gly Ser Thr Tyr Pro Trp Ser Ser Pro Glu Val
                35           40           45
Leu Val Pro Leu Ile Val Gly Gly Val Cys Phe Ala Leu Phe Phe Val
50           55           60
Tyr Glu Cys Phe Leu Glu Pro Asp Arg Leu Phe Ala Arg Met Phe Pro
65           70           75           80
Lys Gln Val Pro Met Leu Pro Tyr Ser Met Phe Ala Arg Arg Asp Thr
                85           90           95
Ile Trp Leu Ala Val Leu Glu Phe Ser Ser Gly Ala Gly Thr Asp Val
                100          105          110
Ile Phe Cys Phe Cys Gly Gln Gln Val Leu Met Leu Ala Leu Gln Leu
115          120          125
Cys Thr Pro Ser Phe Ile Ser Ser Val Tyr Ile Ser His
130          135          140

```

&lt;210&gt; 44193

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19970

&lt;400&gt; 44193

Cys His Leu Leu Leu Trp Ser Thr Gly Thr Asp Ala Gly Ile Ala  
 1 5 10 15  
 Ala Met Tyr Ser Val Phe Tyr Phe Ile Gly Ile Tyr Phe Thr Leu Val  
 20 25 30  
 Glu Ala Tyr Pro Ala Ser Arg Ala Gly Ile Asn Leu Leu Tyr Tyr Ile  
 35 40 45  
 Pro Gly Leu Gly Gly Ile Ser His Ala Pro Cys Phe Asn Ser Ser Ile  
 50 55 60  
 His Ser  
 65

&lt;210&gt; 44194

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44194

Lys Thr Ala Pro Gly Ala Ala Cys Val Pro Val Ala Gly Ala Ser Pro  
 1 5 10 15  
 Ser Pro Ala Thr Leu Asn Arg Met Pro Ser Ser Thr Pro Pro Gly Met  
 20 25 30  
 Ser Thr Val Met Val Phe Leu Ser Arg Thr Thr Pro Leu Pro Leu Gln  
 35 40 45  
 Val Pro His Ser Glu Pro Arg Gly Thr Ile Met Pro Ala Pro Pro Gln  
 50 55 60  
 Ala Ser Gln Val Ala Ala Thr Trp Lys Pro Pro Cys Met Lys Cys Thr  
 65 70 75 80  
 Arg Val Pro Glu Pro Leu His Trp Arg His  
 85 90

&lt;210&gt; 44195

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44195

Ala Ala Asp Ile Asn Phe Glu Asp Leu Phe Gly Ala Phe Thr Gly Gly  
 1 5 10 15  
 Ala Arg Arg Ser Gly Arg Gly Arg Arg Gly Pro Phe Gln Glu Ile Leu  
 20 25 30  
 Val Gly Glu Asp Ile Glu Val Gln Thr Asn Ile Ser Phe Met Glu Ala  
 35 40 45  
 Ala Lys Gly Thr Ser Lys Asp Val Val Ile Thr Pro Leu Val Glu Cys  
 50 55 60  
 Gly Thr Cys Arg Gly Gly Gly Leu Lys Glu Gly Ala Lys Arg Ser Gln  
 65 70 75 80  
 Cys Arg Gln Cys Asn Gly Ser Gly Thr Arg Val His Phe Met Gln Gly  
 85 90 95  
 Gly Phe Gln Val Ala Ala Thr Cys Asp Ala Cys Gly Gly Ala Gly Met  
 100 105 110  
 Ile Val Pro Arg Gly Ser Glu Cys Gly Thr Cys Arg Gly Asn Gly Val  
 115 120 125  
 Val Arg Asp Lys Lys Thr Ile Thr Val Asp Ile Pro Gly Gly Val Glu  
 130 135 140

## 19971

Asp Gly Met Arg Leu Arg Val Ala Gly Glu Gly Asp Ala Pro Ala Thr  
 145 150 155 160  
 Gly Thr Gln Ala Ala Pro Gly Ala Val Phe Tyr His Arg Gly Arg Arg  
 165 170 175  
 Ile Arg Ala Met Arg Val  
 180

&lt;210&gt; 44196

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (96)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44196

Val Arg Lys Tyr Gln Gly Arg Ala His Met Ser Asn Gly Arg Ile Asp  
 1 5 10 15  
 Tyr His Leu His Tyr Cys Thr Ile Phe Tyr Phe Met Ser Phe Pro His  
 20 25 30  
 Leu Leu Ser Leu Gly Cys Lys Tyr Thr Met Phe Leu Leu His Ala Cys  
 35 40 45  
 Thr Thr Lys Lys Glu Ser Glu Glu Ser Phe Gln Gln Val Lys Cys Asn  
 50 55 60  
 His Pro Leu Asn Val Ile Lys Ala Ile Leu Phe Phe Phe Phe Phe Phe  
 65 70 75 80  
 Val Phe Thr Arg Gly Trp Lys Asp Gln Arg Ser His Phe Ser Pro Xaa  
 85 90 95  
 Phe Ser Ala Ser  
 100

&lt;210&gt; 44197

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (135)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44197

Val Asn Pro Ser Val Val Leu Leu Arg Arg Gly Glu Asp Cys Thr Glu  
 1 5 10 15  
 Val Ile Thr Ile Ser Ala Ala Gly Val Val Phe His Asp Gln Leu Thr  
 20 25 30  
 Ala Ile Asn Ile Ala Gly Leu Leu Ile Thr Ile Ala Ser Ile Gly Cys  
 35 40 45  
 Tyr Asn Tyr Met Lys Ile Ser Lys Met Arg Ser Glu Ala Arg Arg Gly  
 50 55 60  
 Thr Trp Glu Arg Ser Pro Asn Leu Asp Ser Glu Ser Asp Asp Ser Gly  
 65 70 75 80  
 Arg Ala Arg Ser Arg Ser Arg Gly Thr Tyr His Arg Ile Asn Asp Pro  
 85 90 95

## 19972

Glu Thr Ser Met Val Thr Pro Val Ser His Val Pro Thr Ser Asp Ile  
                   100                  105                  110  
 Pro Ala Pro Val Asp Gly Leu Ile Gly Asp Arg Arg Ser Phe Gln Val  
                   115                  120                  125  
 Arg Ala Ser Gly Ala Ser Xaa Asn Ile His Gly Leu Thr Ile Ser Thr  
                   130                  135                  140  
 Gly Asn Leu Ser Asp Ser Asp Thr Arg Pro Phe Ser Pro Arg Leu Ala  
 145                  150                  155                  160  
 Gly Pro Ser Pro Leu Lys Ser  
                   165

&lt;210&gt; 44198

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (48), (129), (131)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44198

Leu Ala Ala Glu Gln His Leu Thr Tyr Ala Phe Cys Ile Phe Leu Arg  
 1                  5                  10                  15  
 Val Pro Arg Ser Ile Asn Thr Asp Asp Cys Cys Ser Val Arg Arg Ser  
                   20                  25                  30  
 Ser Phe Ser Ile Phe Ser Arg Leu Val Leu Cys Ser Thr Leu Val Xaa  
                   35                  40                  45  
 Gly Val Ser Ile Ile Phe Lys Thr Pro Pro Arg Ile Phe Ala Ser Phe  
                   50                  55                  60  
 Pro Ala Ala Ser Cys Ser Pro Asn Tyr Thr His Thr Ala Asn Met Ser  
 65                  70                  75                  80  
 Tyr Gln Gln Glu Arg Tyr Ile Ala Glu Leu Ala Val Gln Arg Ala Thr  
                   85                  90                  95  
 Leu Leu Thr Gln Lys Val Phe His Glu Lys Ala Lys Gly Thr Val Ser  
                   100                  105                  110  
 Lys Asp Asp Lys Ser Pro Val Thr Ile Gly Asp Phe Gly Ala Gln Ala  
                   115                  120                  125  
 Xaa Ile Xaa Gln Ala Leu Arg Lys Asn Phe Pro Asn Asp Glu Ile Val  
                   130                  135                  140  
 Ala Glu Glu Glu Ala Asn Ser Leu Arg Glu Asp Lys Ala Leu Ser Ala  
 145                  150                  155                  160  
 Glu Ile Trp Arg Leu Val Lys Asp Ile Arg Leu Gly Asp Asn Glu Ser  
                   165                  170                  175  
 Asn Glu Leu Leu Gly Gly Leu Leu Pro Ser Glu Asp Ala Met Leu Asp  
                   180                  185                  190  
 Ile Ile Asp Gln Gly Lys Ser Ser Pro Arg Pro Trp Lys Asp Gln Gln  
                   195                  200                  205  
 Leu

&lt;210&gt; 44199

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

## 19973

&lt;400&gt; 44199

```

Arg Phe Gly Phe Ala Ile Thr Glu Arg Thr Ile His Thr Ser Tyr Asp
1           5           10           15
Ser Val Thr Gln Trp Tyr Ser Asp Leu Pro Arg Ser Ser Asp Arg Asn
           20           25           30
Phe Asn Leu Ser Ser Ala Ile Gly Leu Gln Gly Ser Lys Thr Val Val
           35           40           45
Leu Lys Ala Ile Ile Asn Tyr Leu Ser Thr Ser Ala Gly Asp
           50           55           60

```

&lt;210&gt; 44200

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44200

```

Gly Asn Ile Ala Ser Val Ser Ser Tyr Ser Leu Glu Ser Val Phe Arg
1           5           10           15
Leu Ile Pro Val Phe Ser Pro Phe Ser Gln Ser Ala Leu Leu Ile Leu
           20           25           30
Lys Leu Leu Ile Pro Phe Ala Ile Ile Ser Ala Asn Leu Gly Ile Leu
           35           40           45
Asn Arg Arg Leu Glu Val Ala Pro Ser Ala Leu Phe Met Val Val Met
           50           55           60
Ser Ile Ser Asp Val Met Thr Leu Asn Phe Phe Tyr Met Val Arg Asp
65           70           75           80
Glu Gly Ser Trp Leu Asp Ile Gly Thr Thr Ile Ser His Phe Leu Ile
           85           90           95
Ala Ser Phe Leu Cys Thr Phe Val Ala Gly Leu Glu Phe Leu Ser Glu
           100          105          110
Val Phe Ile Ser Gly Val Asp Phe Gly Pro Thr Thr Lys Ala Ile Gly
           115          120          125
Ala Ser Ile Thr Lys Thr Val Gly Gly Thr Ala Gly Ser Asp Val Val
           130          135          140
Asp Ser Gln Ser Gly Pro Glu Asp Ala Ala Asn Ser Lys Lys Ala Glu
145          150          155          160
Gly Leu Glu Gly Ser Glu Thr Ile Arg Arg His Gly Gly Leu Tyr Ser
           165          170          175
Pro Gly Ala Glu Arg Thr Ala Ser Val Phe
           180          185

```

&lt;210&gt; 44201

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44201

```

Pro Ser Gln Arg His Asp Leu Gly Pro Ile Arg Arg Arg Arg Leu Ser
1           5           10           15
Gly Cys Ala Gly Ser Arg Gln Arg Thr Arg Gln Pro Thr Gln Ala Leu
           20           25           30
Arg Gln Ser Ala Arg Gln Leu Ala Leu Leu Ala Lys Asp Leu Arg Leu
           35           40           45
Arg Arg Pro Arg Ser Arg Ser His Leu Arg Pro Ala Cys His Ser His
50           55           60
Arg Leu Arg Gln Cys His Arg Leu Pro Arg Leu Pro Glu Ile Arg Arg

```

## 19974

```

65              70              75              80
Arg Pro Asp His Pro Arg Arg Lys Pro His His Gln Arg Gln Pro His
      85              90              95
Leu Gln His Lys Leu Leu His Leu Gly Pro Arg Tyr Arg Arg Arg Ile
      100              105              110
Pro Pro Arg Ile Pro His His Arg Arg Arg Pro Pro Gln Asn Gln Asn
      115              120              125
Pro Leu Arg Leu Arg His Val Gln His Pro Arg Gly Arg Glu Leu Pro
      130              135              140
Pro Leu Arg Pro Gly Gln Asp Arg
145              150

```

&lt;210&gt; 44202

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (1)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44202

```

Xaa Ser Pro Asp Phe Gly Gly Asp Pro Arg Asn Val Thr Ile Trp Gly
1      5      10      15
Gln Ser Ala Gly Ala Gly Ser Val Val Ala Gln Val Leu Ala Asn Gly
      20      25      30
Arg Gly Asn Gln Pro Lys Leu Phe Asp Lys Ala Leu Val Ser Ser Pro
      35      40      45
Phe Trp Pro Lys Thr Tyr Ala Tyr Asp Ala Pro Glu Ala Glu Ala Ile
      50      55      60
Tyr Asp Gln Leu Val Thr Leu Thr Gly Cys Ala Asn Ala Thr Asp Ser
65      70      75      80
Leu Ala Cys Leu Lys Ser Val Asp Val Gln Thr Ile Arg Asp Ala Asn
      85      90      95
Leu Ile Ile Ser Ala Ser His Thr Tyr Asn Thr Ser Ser Tyr Thr Trp
      100      105      110
Ala Pro Val Ile Asp Gly Glu Phe Leu Gln Glu Ser Leu Thr Thr Ala
      115      120      125
Val Ala Arg Arg Lys Ile Lys Thr His Phe Val Phe Gly Met Tyr Asn
      130      135      140
Thr His Glu Gly Glu Asn Phe Leu Pro Ser Gly Leu Gly Lys Thr Ala
145      150      155      160

```

&lt;210&gt; 44203

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44203

```

Arg Gly Ile Asn Ser Thr Pro Gln Ile Gly Ala Gly Asn Tyr Trp Leu
1      5      10      15
Val Met Tyr Ser Tyr Leu Asn His Thr Ala Ser Glu Phe Arg Pro Leu
      20      25      30
Phe Ile Ser Thr Arg Thr Gly Ser Ala Val Ala Thr Thr Ile Lys Thr
      35      40      45

```

# 19975

Asn Ser Thr Thr Asp Pro Leu Ala Asn Arg Arg Pro Val Arg Ser Trp  
 50 55 60  
 Leu Val Phe Pro Ser Glu His Pro Lys Arg Ser Cys Cys Pro Ser Asn  
 65 70 75 80  
 Pro Pro Tyr

<210> 44204  
 <211> 113  
 <212> PRT  
 <213> A.fumigatus

<400> 44204  
 Ile Gly Ser Leu Tyr Ser Arg Met Thr Asp Tyr Thr Val Pro Ala Thr  
 1 5 10 15  
 Glu Ile Asp Leu Ala Glu Ala Arg Lys Thr Phe Glu Thr Asn Phe Phe  
 20 25 30  
 Ala Val Ile Ser Ile Cys Gln Ala Phe Leu Pro Leu Leu Ile Lys Ala  
 35 40 45  
 Lys Gly Thr Ile Val Met Ile Gly Ser Val Ala Gly Val Ser Lys Ser  
 50 55 60  
 Thr Ser Leu Ile Ser His Phe Ser Gly Phe Asp Ser Leu Pro Leu Cys  
 65 70 75 80  
 Lys Asp His Thr Leu Cys Val Arg Val Gly Leu Gln Arg Leu Lys Ser  
 85 90 95  
 Ser Ala Thr Phe Ile Gln Arg His Ala Ala Gly Gly Thr Cys Ser Leu  
 100 105 110  
 Trp

<210> 44205  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

<400> 44205  
 Thr Ser Gly Thr Val Thr Thr Ser Thr Tyr Ser Thr Val Ser Thr Val  
 1 5 10 15  
 Thr Leu Thr Ser Thr Ser Thr Ile Cys Thr Ala Cys Glu Ala Ser Ala  
 20 25 30  
 Thr Pro Ala Pro Ser Phe Ala Ala Pro Val Thr Thr Ala Pro Ala Pro  
 35 40 45  
 Glu Asp Met Thr Thr Thr Val Val Thr Tyr Glu Thr Val Thr Thr Cys  
 50 55 60  
 Pro Gly Ala Phe Ser Gln Arg Thr Gly Arg Ser Ala Met Val  
 65 70 75

<210> 44206  
 <211> 211  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (5), (30)  
 <223> Identity of amino acid sequences at the above locations are unknown.

19976

<400> 44206

```

Ser Cys Leu Thr Xaa Gly Arg Arg Ser Cys Glu Asn Ala Thr Thr Gln
1          5          10          15
Ala Gln Cys Arg Ser Ser Thr Ser Arg Arg Gly Ala Ile Xaa Glu Val
          20          25          30
Arg Trp Lys Asp His Arg Gln Pro Val Trp Val Thr Lys Phe Ser Pro
          35          40          45
Ser Asp Pro Thr Ser Val Leu Ser Ala Ser Asp Asp Arg Thr Val Arg
          50          55          60
Leu Trp Asp Leu Pro Ser Gln Ser Ala Ala Arg Thr Phe Leu Gly His
65          70          75          80
Thr Asp Tyr Val Arg Ser Gly Ala Tyr Met Pro Gly Ser Leu Ala Ala
          85          90          95
Ser Gly Leu Val Val Ser Gly Ser Tyr Asp Arg Thr Val Arg Leu Trp
          100          105          110
Asp Pro Arg Val Glu Asn Arg Ala Ala Met Thr Phe Lys Met Ala Ala
          115          120          125
Pro Ile Glu Ser Val Leu Pro Met Pro Thr Gly Thr Thr Leu Leu Ala
          130          135          140
Ser Ala Glu Asn Lys Ile Ala Val Leu Asp Ile Val Ala Gly Lys Pro
145          150          155          160
Leu His Met Ile Gln Ser His His Lys Thr Val Thr Ala Leu Ala Leu
          165          170          175
Ala Ser Asn Gly Glu Arg Leu Leu Ser Gly Ala Leu Asp Gly His Met
          180          185          190
Asn Val Phe Glu Thr Thr Gly Trp Asn Leu Val Ser Gly Ser Lys Tyr
          195          200          205
Pro Pro Pro
          210

```

<210> 44207

<211> 124

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (94), (120)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44207

```

Thr Ser Ser Pro Pro Gly Ser Pro Arg Gly Asp Pro Thr Ala Ser Pro
1          5          10          15
Ser Asp His Asn Ser Pro Arg Pro Pro Ser Pro Thr Pro Pro Ala Ser
          20          25          30
Gln Ala Cys Thr Pro Arg Tyr Ala Arg Ser Leu Tyr Ala Pro Gly Thr
          35          40          45
Ser Ala Arg Arg Ser Gly Ser Ala Asn Pro Thr Ala Ala Arg Ser Gly
          50          55          60
Arg Arg Trp Arg Ser Ala Pro Arg Leu Asp Arg Ser Ala Arg Thr Trp
65          70          75          80
Ser Pro Thr Pro Ala Ala Gly Gly Pro Ser Asn Val Leu Xaa Gly Ser
          85          90          95
Pro Arg Asp Ala Thr Ser Lys Thr Cys Thr Ala Pro Val Ser Ser Arg
          100          105          110

```



# 19977

Phe His Thr Thr Ala Ala Arg Xaa Ser Ser Met Lys  
115 120

<210> 44208

<211> 210

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (182), (207)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44208

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Gly | Val | Leu | Gly | Pro | Arg | His | Lys | Val | Pro | Pro | Ser | Gly | Leu |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | His | Val | His | Val | Pro | Val | Gln | Arg | Thr | Thr | Gln | Gln | Pro | Leu | Pro |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Ile | Arg | Arg | Gln | Arg | Gln | Arg | Arg | His | Arg | Leu | Met | Val | Thr | Leu | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Met | Gln | Arg | Leu | Pro | Arg | His | Asn | Ile | Gln | Asp | Arg | Asp | Phe | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Arg | Arg | Arg | Gln | Gln | Arg | Arg | Pro | Arg | Arg | His | Arg | Gln | His | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Asn | Arg | Arg | Arg | His | Leu | Lys | Arg | His | Arg | Arg | Pro | Val | Leu | His |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ala | Gly | Ile | Pro | Gln | Pro | His | Arg | Pro | Ile | Ile | Thr | Pro | Arg | Asp | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gln | Ala | Arg | Arg | Arg | Gln | Arg | Ala | Arg | His | Val | Arg | Pro | Ala | Thr | His |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Val | Val | Cys | Met | Pro | Gln | Glu | Arg | Pro | Arg | Gly | Ala | Leu | Ala | Arg | Gln |
|     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Ile | Pro | Gln | Pro | His | Gly | Pro | Val | Val | Ala | Gly | Ala | Gln | His | Arg | Gly |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Trp | Ile | Ala | Arg | Arg | Glu | Leu | Gly | His | Pro | His | Arg | Leu | Pro | Val | Val |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Leu | Pro | Thr | Tyr | Phe | Xaa | Asp | Arg | Pro | Ala | Thr | Arg | Arg | Arg | Arg | Pro |
|     |     |     | 180 |     |     |     | 185 |     |     |     |     | 190 |     |     |     |
| Ala | Leu | Arg | Leu | Cys | Arg | Arg | Val | Phe | Thr | Arg | Pro | Pro | Pro | Xaa | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gln | Ala |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 210 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 44209

<211> 61

<212> PRT

<213> A.fumigatus

<400> 44209

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Trp | Ile | Ile | Cys | Ser | Gly | Phe | Pro | Ala | Thr | Ile | Ser | Arg | Thr | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Leu | Phe | Ser | Ala | Asp | Ala | Ser | Ser | Val | Val | Pro | Val | Gly | Ile | Gly |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Asn | Thr | Leu | Ser | Ile | Gly | Ala | Ala | Ile | Leu | Asn | Val | Ile | Ala | Ala | Arg |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Phe | Ser | Thr | Arg | Gly | Ser | His | Ser | Leu | Thr | Val | Arg | Ser |     |     |     |

## 19978

50

55

60

&lt;210&gt; 44210

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (11)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44210

```

Arg Ala Gln Tyr Leu Pro Val Pro Ser Leu Xaa Asp Gly Thr Leu Arg
1          5          10          15
Gly Val Leu Gln Pro Ala Ser Ser Ala Ala Leu Val Gly Gln Val Leu
          20          25          30
Leu His Ala Ala Gln Gly Val Asn Gly Met Gly Met Gly Ser Gly Asn
          35          40          45
Gly Lys Gln Cys Gln Gly Asn Gly Ala Val Gly Ser Arg Gly Leu Ser
          50          55          60
Ala Thr Glu Phe Phe Thr Phe Val Glu Gly Gly Gly Glu Phe Ala Thr
65          70          75          80
Thr Ser Gly Thr Val Ser Gly Gln Gly Pro Tyr Thr Ala Ala Gly Gly
          85          90          95
Ser Trp Ser Gly Arg Met Ile Arg Glu Ile Val Lys Val Leu Gln Trp
          100          105          110
His Val Ser Lys Val Leu Thr Leu Leu Glu Ala Leu Gln Gly Thr Ser
          115          120          125
Pro Leu Ala Arg Tyr Lys Met Ser Leu His Gln Gln Cys Met
          130          135          140

```

&lt;210&gt; 44211

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44211

```

Glu Lys Pro Gln Pro Tyr Lys Ile Thr Thr Ser Tyr Pro Thr Phe Ser
1          5          10          15
Ser Ser Pro Gln Leu Pro Ser Pro Glu Phe Pro His Ser Asp Tyr Arg
          20          25          30
Asn Pro Gln Pro Pro Ala Lys Ser Asn Ile Ser Tyr Leu Pro Asn Tyr
          35          40          45
Leu Pro Asn Ser Leu Leu Gln Leu Asn Pro Pro Pro Cys Gln Tyr
          50          55          60
Gln Pro Thr Gly Pro Arg Ser Leu Glu Pro Ala Pro Leu Asn Thr
65          70          75

```

&lt;210&gt; 44212

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44212

```

Met Tyr Asp Phe Gly Val Arg Gly Ala Ser Asp Val Val Lys Ala Leu

```

## 19979

```

1           5           10           15
Ala Leu Gly Ala Lys Phe Val Phe Val Gly Arg Leu Trp Val Trp Gly
      20           25           30
Leu Ser Ile Met Gly Glu Glu Gly Val Arg His Val Met Lys Ser Leu
      35           40           45
Leu Ala Asp Phe Asp Ile Leu Met Gly Val Gly Gly Phe Asn Ser Ile
      50           55           60
Lys Asp Phe Asp Lys Ser Ile Leu Gly Met Ser Ser Ser Val Lys Lys
      65           70           75           80
Gly Thr Ala Ala Asp His Leu Leu Glu Ser Tyr Pro Arg Ser Tyr Thr
      85           90           95
Tyr Ile Pro Gly Lys Val Leu
      100

```

&lt;210&gt; 44213

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44213

```

Gly Gly Xaa Leu Lys Leu Met Leu Tyr Asp Phe His Pro Arg Gly Glu
1           5           10           15
Asp Ile Ile Leu Phe Ser Phe Met Ser Leu Ser Val Gln Gly Pro Gly
      20           25           30
Ala Ser Pro Glu Ile Ile His Lys Ala Val Tyr Leu Ser Thr Val Leu
      35           40           45
Leu Leu Tyr Ser Ser Arg Phe Ser Ile Ser Thr Val Val Arg Ser His
      50           55           60
Pro Phe Arg Ser Leu Ser Ile Tyr Thr Ala Thr Met Gln Phe Lys Ala
      65           70           75           80
Leu Ala Thr Leu Leu Phe Ala Ala Leu Ala Val Ala Asn Pro Ala Pro
      85           90           95
Ala Pro Gln Ala Gly Asp Leu Asn Ala Leu Met Gly Ser Ile Pro Thr
      100           105           110
Ser Val Leu Gly Val Leu Met Thr Ala Ile Pro Pro Ser Val Val Ser
      115           120           125
Ala Leu Ala Asn Pro Thr Gln Ala Ala Ser Met Phe Gln Gln Ile Glu
      130           135           140
Gln Gly Gln Ile Pro Asp Trp Tyr Asn Asn Leu Pro Asp Ser Val Lys
      145           150           155           160
Ala Trp Ala Thr Ser Ala Ala Ile Ala
      165

```

&lt;210&gt; 44214

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (7)

# 19980

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44214

```

Leu Ile Xaa Ser Gly Ser Xaa Pro Gly Arg Cys Glu Asn Ala Val Asn
1           5           10           15
Val Val Leu Thr Arg Leu Leu Asp Ala Ala Asp Thr Leu Ser Thr Tyr
          20           25           30
Ser Ile Pro Arg Arg Pro Leu Ser Ser His Asp Trp Gly Ser Gly Ala
          35           40           45
Gly Val Ser Leu Asp Glu Leu Thr Ser Gln His Ala Glu Arg Ala Pro
          50           55           60
Glu Leu Ile His Leu Thr Lys Ser Ala Ile Ala Ser Glu Leu Thr Ser
65           70           75           80
Phe Asp Ser Trp Thr Glu Arg Pro Phe Ala Asp Glu His Ala Lys Arg
          85           90           95
Phe Met Ala Glu Val Trp Gln Ser Leu Gly Ser Ile Val Leu Asp Ala
          100          105          110
Ala Asp Ala Ser Pro Asn Glu Ser Lys Leu Ala Met Ser Tyr Val Phe
          115          120          125
Arg Ile Leu Ala Arg Leu His His Ser Gly Ala Val Ser Asp Arg Val
          130          135          140
Tyr Lys Tyr Asp Pro Pro Ser Ala His Arg Val Asp Phe Arg Pro Pro
145          150          155          160
Gly Met His Leu Leu Ser Thr His Ile Met Ser Val Leu Thr Asp Ala
          165          170          175
Ala Trp Leu Ala His Glu Ala Glu Val Ala Ala Lys Ala Ala Ala Ala
          180          185          190
Gly Lys Lys Ser Pro Tyr Leu Pro Phe Asp Leu Gly Ile Arg Glu Leu
          195          200          205
Gly His
          210

```

<210> 44215

<211> 214

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (176), (191), (203)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44215

```

Leu Leu Val Thr Gln Leu Arg Ser Phe Gln Ala Val Val Lys Thr Gly
1           5           10           15
Arg Leu Val Asp Pro Asn Thr Lys Arg Val Tyr Thr Pro Gly Met Ile
          20           25           30
Ser Lys Ala Leu Asp Gln Leu Ser Ser Ala Ser Gly Gln Gln Gln Met
          35           40           45
Gln Gln Glu Gly Asn Gly Asn Gly Asn Gly Ala Gly Asp Glu Asn Gly
          50           55           60
Pro Ala Gln Pro Arg Lys Pro Leu Trp Thr Gly Val Thr Pro Asn Lys
65           70           75           80
Ser Ala Lys Ser Gln Ala Leu Glu Ala Met Lys Ala Leu Ile Ala Trp
          85           90           95
Gln Pro Ile Pro Val Met Arg Ala Arg Met Arg Leu Arg Val Thr Cys

```

# 19981

```

      100              105              110
Pro Val Ala Leu Leu Lys Gln Ser Val Lys Ala Ala Ala Ala Pro Gly
      115              120              125
Pro Asn Lys Glu Arg Glu Gly Pro Ser Gly Gly Ala Lys Asn Asn Lys
      130              135              140
Lys Gly Gly Lys Gly Gly Lys Gly Lys Ala Val Arg Gln Gln Asp Ser
145              150              155              160
Asp Val Glu Ala Gly Gly Ser Asp Ala Glu Met Ala Pro Ala Leu Xaa
      165              170              175
Ala Pro Thr Asn Val Lys Asp Lys Ile Met Ser Phe Ile Glu Xaa Val
      180              185              190
Glu Ser Gln Glu Met Val Gly Gly Asp Glu Xaa Glu Val Val Gly Phe
      195              200              205
Ala Glu Pro Gly Ala Phe
      210

```

<210> 44216  
 <211> 84  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44216
Leu Phe Ala Asp Leu Phe Gly Val Thr Pro Val Gln Ser Gly Phe Arg
1              5              10              15
Gly Cys Ala Gly Pro Phe Ser Ser Pro Ala Pro Phe Pro Phe Pro Phe
      20              25              30
Pro Ser Cys Cys Ile Cys Cys Cys Pro Leu Ala Glu Leu Asn Trp Ser
      35              40              45
Ser Ala Leu Glu Ile Ile Pro Gly Val Tyr Thr Arg Phe Val Leu Gly
      50              55              60
Ser Thr Asn Leu Pro Val Phe Thr Thr Ala Trp Lys Asp Arg Asn Cys
65              70              75              80
Val Thr Ser Lys

```

<210> 44217  
 <211> 85  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (1)  
 <223> Identity of amino acid sequences at the above locations are unknown.

```

<400> 44217
Xaa Gly Arg Asn Glu Met Glu Ala Arg Ala Arg Ala Lys Lys Glu Ser
1              5              10              15
Gln Gln Asn Asn Gly Asn Thr Pro Ser Lys Asp Asp Ser Asn Ser Lys
      20              25              30
Ala Ser Pro Lys Gly Lys Lys Arg Lys Arg Ser Asp Ser Arg Gly Ser
      35              40              45
Gly Lys Glu Gln Asp Gly Asp Arg Asp Val Glu Glu Glu Asn Lys Ile
      50              55              60
Ala Lys Arg Asn Arg Ile Ile Ser Arg Lys Arg Met Gln Arg Lys Ala
65              70              75              80

```

# 19982

Arg Lys Gly Lys Ala  
85

<210> 44218  
<211> 154  
<212> PRT  
<213> A.fumigatus

<400> 44218  
Arg Leu Pro Leu Thr Ala Ser Leu Asn Gln Gly Pro Leu Asp Leu Arg  
1 5 10 15  
Val Thr Glu Leu Pro Thr Pro Ser Pro Ser Pro Tyr Lys Tyr Leu Ile  
20 25 30  
Glu Val His Ser Ala Gly Thr Asn Phe Phe Asp Leu Leu Gln Ile Gln  
35 40 45  
Gly Lys Tyr Gln His Gln Pro Pro Leu Pro Trp Ile Gly Gly Ala Glu  
50 55 60  
Phe Ala Gly Thr Ile Leu Ala Val Pro Thr Gly Gln Lys Lys Thr Gln  
65 70 75 80  
Phe Lys Val Gly Asp Arg Val Phe Gly Ala Thr Gln Gly Ala Tyr Ala  
85 90 95  
Thr His Val Leu Ala Pro Glu Ala Ser Leu Leu Pro Ile Pro Ala Gly  
100 105 110  
Trp Ser Phe Glu Asp Ala Ala Gly Leu Phe Val Thr Ala Pro Thr Ser  
115 120 125  
Tyr Gly Gly Leu Val His Arg Ala Asn Val Gln Pro Gly Asp Trp Val  
130 135 140  
Leu Val His Ala Ala Ala Gly Gly Leu Gly  
145 150

<210> 44219  
<211> 78  
<212> PRT  
<213> A.fumigatus

<400> 44219  
Leu Pro Ile Val Phe Phe Trp Cys Val Gln Ser Phe Trp Asn Ile Leu  
1 5 10 15  
Lys Ser Pro Thr Arg Ser Leu Ser Arg Lys Ile Thr Pro Trp Lys Arg  
20 25 30  
Ala Met His Asp Ala Leu Leu Ala Ala Lys Gln Lys Leu Arg Glu Tyr  
35 40 45  
Tyr Asp Lys Thr Asp Arg Asp His Gly Phe Leu Tyr Ala Thr Gly Thr  
50 55 60  
Met Leu Ala Pro Gln Tyr Lys Leu Trp Ala Phe Gly Asp Thr  
65 70 75

<210> 44220  
<211> 239  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (54), (61), (231)  
<223> Identity of amino acid sequences at the above locations are unknown.

19983

<400> 44220

```

Leu Thr Tyr Leu Lys Leu Thr Leu Leu Val Ala Glu Glu Ala Ile Arg
1      5      10      15
Met Tyr Ser Arg Val Leu Arg Ser Glu Leu Phe Gly Asn Thr Val Pro
      20      25      30
Gln Ala Asp Leu Asp Ser Leu Ser Pro Asp Pro Leu Leu Gly Ile Pro
      35      40      45
Asn Gly Leu Asn Glu Xaa Thr Arg Ser His Thr Pro Xaa Ala His Thr
      50      55      60
Ile Ser Asn Leu Pro Pro Ala Ser Ile Thr Pro Ser Thr Pro His Lys
65      70      75      80
Asn Leu Phe Thr Tyr Ala Ser Pro Arg Ile Gly Ser Gly Gln Pro Thr
      85      90      95
Pro Ser Lys Thr Pro Arg Ser Gln His Gly Pro Asn Leu Asn Val Arg
      100      105      110
Ser Glu Leu Tyr Ser Leu Ser Pro Ile Arg Tyr Asp Ser Gln Arg Ile
      115      120      125
Leu Glu Thr Pro Arg Lys Gln Pro Arg Tyr Val Asn Lys Val Pro Tyr
      130      135      140
Lys Val Leu Asp Ala Pro Asp Leu Gln Asp Asp Phe Tyr Leu Asn Leu
145      150      155      160
Val Asp Trp Gly Ser Ser Asn Val Leu Gly Val Gly Leu Gly Asn Ser
      165      170      175
Val Tyr Met Trp Asn Ser Asn Thr Gly Arg Val Thr Lys Leu Cys Glu
      180      185      190
Leu Arg Asp Asp Thr Val Thr Ser Val Ser Trp Ile Gln Arg Val Met
      195      200      205
Arg Phe Leu Tyr Met Leu Ala Met Ile Ile Met Cys Phe Met Thr Glu
      210      215      220
Asp Gly Thr Gly His Ile Xaa Tyr Asp Arg His Gln Lys Ile Ile
225      230      235

```

<210> 44221

<211> 118

<212> PRT

<213> A.fumigatus

<400> 44221

```

Ser Met Pro Asp Ala Asp Asp Gln Ile His Pro Ala Gly Arg His Val
1      5      10      15
Pro Gln Thr Ser Gly Glu Pro Ser Glu Gly Leu Pro Ala Trp Ile Glu
      20      25      30
Ser Ala Gly Pro Asn Cys Ser Ile Glu Asn Thr Asp Ile Val Leu Trp
      35      40      45
His Thr Phe Gly Leu Thr His Phe Pro Ser Pro Glu Asp Phe Pro Ile
      50      55      60
Met Pro Ala Glu Pro Met Thr Val Leu Leu Arg Pro Arg Asn Phe Phe
65      70      75      80
Ala Arg Asn Pro Ala Leu Asp Val Pro Pro Ser Tyr Ala Arg Thr Pro
      85      90      95
Ser Gln Val Ala Ala Gly Thr Asn Ala Cys Ser Cys Lys Lys Ile Asp
      100      105      110
Gly Ser Ser Val Gln Val
      115

```

## 19984

&lt;210&gt; 44222

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (77)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44222

```

Pro Gln Lys Asp Met Glu Pro Gly Pro Ser Phe Arg Ala Glu Pro Met
1          5          10          15
Glu Thr Gly Val Cys Ser Leu Pro Tyr Cys Phe Phe Phe Val Asp Gln
          20          25          30
Lys Gly Asn Gly Cys Ser Arg Lys Arg Met Gln Glu Thr Val Gln
          35          40          45
His Glu Leu Ala His His Trp Phe Glu Asn Leu Leu Thr Leu Asp Phe
          50          55          60
Trp Asp Gly Leu Trp Leu Asn Glu Gly Phe Ala Thr Xaa
65          70          75

```

&lt;210&gt; 44223

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (28), (39), (57), (60), (71), (304), (313)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44223

```

Ala Gly Ala Ser Leu Val Arg Lys Leu Val Asp Ile Gly Leu Leu Gly
1          5          10          15
Arg Leu Val Ala Gln Arg Gly Ile Cys Tyr Leu Xaa Val Val Val Phe
          20          25          30
Leu Gln Arg Val Leu Pro Xaa Val Lys Val Trp Glu Thr Tyr Val Ile
          35          40          45
Asp Ser Leu Gln Ser Ala Leu Ser Xaa Asp Ser Xaa Arg Ser Ser His
          50          55          60
Pro Ile Glu Val Pro Val Xaa Arg Ala Asp Glu Ile Asn Gln Ile Phe
65          70          75          80
Asp Ala Ile Ser Tyr Ser Lys Gly Ser Ser Val Leu Arg Met Ile Ser
          85          90          95
Lys Tyr Leu Gly Glu Asp Val Phe Leu Gln Gly Val Arg Asn Tyr Ile
          100          105          110
Lys Lys His Ala Tyr Gly Asn Thr Gln Thr Gly Asp Leu Trp Ser Ala
          115          120          125
Leu Ala Asp Ala Ser Gly Lys Pro Val Glu Lys Val Met Asp Ile Trp
          130          135          140
Thr Lys Asn Val Gly Phe Pro Val Val Ser Val Thr Glu Asn Pro Ser
          145          150          155          160
Ala Ser Ser Ile Lys Leu Lys Gln Asn Arg Phe Leu Arg Thr Gly Asp
          165          170          175
Val Arg Pro Glu Glu Asp Thr Thr Leu Tyr Pro Val Ile Leu Gly Leu

```



## 19985

```

      180      185      190
Arg Thr Lys Gln Gly Ile Asp Glu Asn Thr Met Leu Thr Glu Arg Glu
      195      200      205
Gly Glu Phe Lys Val Pro Asp Leu Asp Phe Tyr Lys Leu Asn Ala Asp
      210      215      220
His Ser Ala Ile Tyr Arg Thr Ser Tyr Pro Pro Glu Arg Leu Ser Lys
      225      230      235      240
Leu Gly Glu Ala Ala Lys Lys Gly Leu Leu Thr Val Glu Asp Arg Ala
      245      250      255
Gly Met Ile Ala Asp Ala Gly Ala Leu Ala Ala Ser Gly Tyr Gln Ser
      260      265      270
Thr Ser Gly Leu Leu Ser Leu Leu Lys Gly Phe Asp Ser Glu Ala Glu
      275      280      285
Phe Val Val Trp Asn Glu Ile Leu Thr Arg Val Gly Thr Val Phe Xaa
      290      295      300
Arg Arg Ser Lys Gly Ser Ser Ile Xaa Lys Arg Pro
      305      310      315

```

&lt;210&gt; 44224

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44224

```

Trp Ser Ala Met Val Ile Phe Arg Asp Gly Ala Asn Cys Leu Pro Arg
1      5      10      15
Gln Arg Asn Ala Pro Tyr Val Phe Gly Ile Arg Ser Ala Ala Cys Ala
      20      25      30
Leu Ala Ala Gly Asn Thr Thr Val Leu Lys Ser Ser Glu Leu Ser Pro
      35      40      45
Cys Ser Tyr Trp Ala Ile Ala Arg Ala Cys Cys Arg Cys Trp Pro Val
      50      55      60
Phe Thr Arg Gly Gly Arg Gly Val His
65      70

```

&lt;210&gt; 44225

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44225

```

Thr Thr Phe Asp Val Ile Ser Pro Tyr Thr Asn Lys Pro Cys Trp Thr
1      5      10      15
Thr Ala Ser Ala Thr Pro Gln Asp Ala Val Arg Ala Val Glu Ala Ala
      20      25      30
Glu Asn Ala Phe Pro Ala Trp Ser Gln Thr Lys Pro Thr Val Arg Arg
      35      40      45
Asp Ile Leu Leu Lys Ser Ala Asp Ile Leu Glu Ser Arg Leu Val Gln
      50      55      60
Asn Ala Glu Tyr Met Arg Thr Glu Met Gly Ala Asp Val Gly Ala Ser
      65      70      75      80
Gln Phe Phe Ile Val Pro Leu Gly Ile Arg Met Leu Arg Glu Ile Ala
      85      90      95
Gly Arg Ile Thr Ser Ile Cys Gly Ser Val Pro Val Val Glu Glu Glu
      100      105      110
Gly Gln Ser Ala Ile Ile Tyr Lys Glu Pro Met Gly Val Ile Leu Gly

```

## 19986

115 120 125  
 Ile Val Pro Trp  
 130

<210> 44226  
 <211> 155  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (148), (153)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44226  
 Pro Phe Pro Gln Arg Asp Tyr Ala Pro Asp Tyr Ser Ser Ile Pro Pro  
 1 5 10 15  
 His Gly Arg Trp Gln His Phe Asp Val Gly Gly Arg Pro Arg Val Asn  
 20 25 30  
 Gln Leu Leu Gln Ser Trp Pro Ser Thr Ile Asp Ala Gln Glu Arg Thr  
 35 40 45  
 Arg Arg Leu Ile Asp Leu Phe Val Val Ser Val Leu Leu Asp Ala Gly  
 50 55 60  
 Ala Gly Thr Lys Trp Ser Tyr Lys Ser Lys Glu Ser Gly Lys Ile Tyr  
 65 70 75 80  
 Ser Arg Ser Glu Gly Leu Ala Val Ala Thr Leu Glu Met Phe Lys Ser  
 85 90 95  
 Gly Leu Phe Ser Ser Asp Pro Thr Glu Pro Cys Gln Val Asp Gly Ala  
 100 105 110  
 Gly Leu Lys Lys Ile Thr Val Glu Val Leu Ala Arg Gly Met Gln His  
 115 120 125  
 Ser Glu His Asn Pro Leu Ala Gly Leu Glu Gly Arg Ala Gly Arg Pro  
 130 135 140  
 Met Ser Leu Xaa Leu Ala Pro Ala Xaa Lys Val  
 145 150 155

<210> 44227  
 <211> 301  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (8)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44227  
 Pro Ile Val Ala Ala Tyr Glu Xaa Ile Gln Pro Val Ala Ala Val  
 1 5 10 15  
 Ser Thr Thr Lys Leu Val Glu Tyr Ile His Leu Thr Gly Asn Arg Tyr  
 20 25 30  
 Ile Phe Lys Ser Asn Asp Arg Leu Tyr Leu Gln Tyr Cys Gln Lys Thr  
 35 40 45  
 Gly Leu Gln Pro His Phe Val Ser Asn Ser Arg Gly Leu Lys Gly Phe  
 50 55 60  
 Trp Ile Gly Ser Pro Ser Ala Lys Tyr Ile Val Ile Tyr Phe His Gly

## 19987

```

65          70          75          80
Met Gln Arg Ser Lys Asp Ala Glu Lys Leu Leu Met Ile Gly Thr Gly
          85          90          95
Gly Gly Phe Ala Met Asp Ala Thr Ala Pro Tyr Leu Asp Phe Trp Pro
          100          105          110
Arg Ile Gln Thr Thr Leu Ala Asn Ala Gly Ile Glu Asn Ala Leu Phe
          115          120          125
His Cys Thr Tyr Thr Leu Thr Pro His Ala Ala Tyr Pro Thr Gln Phe
          130          135          140
Cys Glu Ala Val Glu Ala Leu Arg Tyr Ile Leu Glu Asp Val Gly His
145          150          155          160
Ser Pro Ser Gln Val Leu Leu Val Gly Asp Ser Ala Gly Ala Asn Leu
          165          170          175
Cys Leu Ala Val Leu Ser His Leu Thr His Pro Ser Glu Asp Val Pro
          180          185          190
Glu Leu Val Ile Asn Glu Pro Ile Lys Gly Val Val Leu Met Ser Pro
          195          200          205
Trp Val Ser Phe Arg His His Trp Pro Ser Val Glu Ala Ser Glu His
          210          215          220
Arg Asp Ile Asp Ala Ala Glu Val Leu Thr Glu Trp Ser Arg Ala Tyr
225          230          235          240
Leu Asn Gly Arg Glu Ser Asn Asn Tyr Ile Glu Ala Ala Glu Ala Pro
          245          250          255
Glu Trp Trp Trp Asp Asn Ile Arg Val Arg Gln Thr Leu Val Leu Ala
          260          265          270
Gly Gly Asp Glu Ala Leu Ser Asp Pro Ile Lys Thr Trp Val Asn Ser
          275          280          285
Phe Lys Val Ser Ser Pro Arg Val Leu Arg Gly Ala Arg
          290          295          300

```

&lt;210&gt; 44228

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44228

```

Thr Met Leu Pro Ser Ser Arg Leu Val Leu Thr Ala Asp Gly Arg Ser
1          5          10          15
Ala Pro Thr Gln Thr Gln Ile Ser Thr Gly Thr Pro Phe Trp Tyr Thr
          20          25          30
Tyr Ser Pro Glu Pro Tyr Pro Pro Tyr Thr Gly Pro Ser Gln Thr Ser
          35          40          45
Ser Pro Thr Ser Leu Ile Pro Pro Pro Pro Pro Pro Gly Ser Pro
          50          55          60
Gly Ser Val His Val Thr Gln Gly Pro Pro Ser Pro Thr Pro Arg Pro
65          70          75          80
Gly Asn Asn Pro Lys Asn Gly His Ile Cys Thr Ala Asn Cys Ile Pro
          85          90          95
Glu Pro Pro Cys Leu Ile Cys Gly Cys Ile Gly Pro Gly Cys Arg Gly
          100          105          110
Gly Gly His Cys Ile Gly Arg Gly Cys Ser Ser Gly Gly Gly Ser Asn
          115          120          125
Gly Gly Gly Asp Asp Thr Asn Ser Cys Ser Thr Ser His Thr Ala Asp
          130          135          140
Ile Cys Thr Asp Tyr Ile Ser Ser Tyr Ser Ile Thr Gly Met Asp Ser
145          150          155          160

```

## 19988

Ser Ser Thr Ile Thr Gln Val Phe Thr Leu Ala Met Asp Thr Arg Tyr  
                           165                          170                          175  
 Pro Phe Ala Asn Asp Ala Arg Leu Leu Ala Glu Pro Pro Leu Pro Ala  
                           180                          185                          190  
 Arg Ser Trp Ala Gln Pro  
                           195

&lt;210&gt; 44229

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (169)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44229

Gln Met Tyr His Gln Asn Ala Met Leu Ser Pro Leu Ser Ala Pro Val  
 1                          5                          10                          15  
 Gly Leu Ala Leu Gln Asn Gly Ser Ile Leu Pro Phe Val Gly Ala Pro  
                           20                          25                          30  
 Gln Glu Tyr Met Ser Thr Val Pro Thr Asn Glu Thr Phe Gly Ser Pro  
                           35                          40                          45  
 Pro Glu Ser Ser Val Ala Pro Ser Ala Lys Pro Ala Ser Ser Tyr Gln  
                           50                          55                          60  
 Arg Pro Thr Pro Arg Pro Val Ala Ser His Asp Arg Asn Gly Pro Leu  
 65                          70                          75                          80  
 Ile Val Asp Gly Ser Ile Pro Leu Ser Glu Gln Arg Thr Leu Val Ser  
                           85                          90                          95  
 Gly Glu Ala Tyr Asp Gln Tyr Ala Thr Met Ser His Cys Thr Ser Ala  
                           100                          105                          110  
 Ser Asp Asp Arg Asn Thr Asp Thr Pro Ala Ser Ile Ser Asp Ser Leu  
                           115                          120                          125  
 Ser Gln Asp Tyr Gln Asp Asn Ser Ser Val Glu Ile Asp Gln Ser Ala  
                           130                          135                          140  
 Tyr Phe Thr Arg Gln Thr Ile Asp Ala Pro Lys Ser Arg His Ala Thr  
 145                          150                          155                          160  
 Val Phe Thr Ser Arg Pro Glu Gly Xaa Ala Ile  
                           165                          170

&lt;210&gt; 44230

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44230

Ile Arg Ile Ala Arg Ile Leu Arg Arg Leu Trp Arg Arg Pro Pro Arg  
 1                          5                          10                          15  
 Ile Lys Gly Lys Val Ile Leu Thr Thr Gly Val Ser Ser Gly Ser Leu  
                           20                          25                          30  
 Gly Gly Phe Phe Val Gln Ser Ile Ala Lys Ala Lys Pro Glu Trp Leu  
                           35                          40                          45  
 Ile Leu Ala Ala Arg Asn Ala Asp Lys Leu Ala Gln Met Ala Ala Glu  
                           50                          55                          60  
 Ile Ala Lys Ala Gln Pro Asp Val Lys Val Arg Thr Leu Lys Val Asp

19989

```

65              70              75              80
Leu Gly Ser Leu Glu Ser Val Arg Asp Ala Ala Ala His Val Asn Ser
              85              90              95
Trp Asp Asp Val Pro Val Ile Asp Val Leu Val Asn Asn Ala Gly Ile
              100              105              110
Met Ala Val Asp Tyr Gln Leu Ser Pro Asp Gly Phe Glu Ser His Leu
              115              120              125
Ala Thr Asn His Leu Gly Pro Phe Leu Phe Thr Asn Leu Ile Met Lys
              130              135              140
Lys Ile Val Ala Ala Lys Glu Pro Lys Ile Val Val Val Ser Ser Asp
145              150              155              160
Gly His Arg Leu Asn Pro Phe Arg Phe Asp Asp Tyr Asn Phe Asp Val
              165              170              175
Gly Arg Ser Met Ala Leu Asp
              180

```

<210> 44231  
 <211> 78  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44231
Ile Leu Cys Glu Trp Arg Pro Ala Glu Ser Ala Ile Ile Ser Lys Gln
1              5              10              15
Gly Pro Thr Ser Pro Lys Arg Leu Asp Phe Leu Pro Pro Asn Arg Ile
              20              25              30
Ala Ser Leu Leu Leu Tyr Leu Val Thr Met Leu Cys His Cys Ala Thr
              35              40              45
Phe Leu Val Thr Phe Leu Glu His Val His His Ser Lys Ala Val Thr
              50              55              60
Pro Ser Asp Gly Leu Asp Asn Phe Ile Leu Thr Val Leu Gly
65              70              75

```

<210> 44232  
 <211> 161  
 <212> PRT  
 <213> A.fumigatus

```

<400> 44232
Thr Phe Cys Leu Pro Thr Val Leu Leu Arg Tyr Cys Cys Ile Ser Ser
1              5              10              15
Pro Cys Phe Val Thr Val Pro Pro Phe Leu Ser Pro Ser Trp Asn Thr
              20              25              30
Phe Ile Ile Pro Arg Leu Ser Pro His Leu Met Asp Ser Thr Thr Ser
              35              40              45
Ser Ser Arg Phe Ser Val Ser Ser Pro Gln Ser Gly Pro Ser Ala Gly
              50              55              60
Ile Gln Lys Gly Arg Gln Arg Thr Ile Thr Ala Cys Leu Thr Cys Arg
65              70              75              80
Arg Arg Lys Val Lys Cys Asp His Ala Gln Pro Val Cys Thr Pro Cys
              85              90              95
Gln Arg Gly Gly Arg Val Cys Thr Tyr Val Thr Pro Gln Pro Val Ser
              100              105              110
Gln Ala Pro Ser Arg Val Gly Thr Gly Ser Arg Val Ser Arg Thr Asn
              115              120              125
Leu Arg Ser Gly Gln Glu Glu Ile Arg Ser Arg Leu Glu Arg Leu Glu

```

## 19990

130                                      135                                      140  
 Gln Pro Leu Glu Arg Ala Phe Leu Thr Gly Arg Asp Gly Lys Val Leu  
 145                                      150                                      155                                      160  
 Arg

&lt;210&gt; 44233

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5),(6),(7),(8),(9),(10),(11),(12),(13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44233

Glu Pro Asp Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Glu Asp Asp  
 1                                      5                                      10                                      15  
 Ala Pro Leu Phe Ala His Phe Arg Arg Gln Phe Gln Gln Lys Ser Glu  
                                     20                                      25                                      30  
 Glu Asp Gln Ser Asp Val Cys Ile Gly Lys Leu His Glu Asn Leu Arg  
                                     35                                      40                                      45  
 Ala Val Asn Asn Leu Glu Glu Ala Ser Gly Val Ile Tyr Ser Ala Leu  
                                     50                                      55                                      60  
 Ser Gly Lys Ile Ala Ala His Leu Ser Val Pro Ile Glu Ser Ile Asp  
 65                                      70                                      75                                      80  
 Ala Ser His Pro Ile Thr Glu Tyr Gly Ile Asp Ser His Met Ala Val  
                                     85                                      90                                      95  
 Glu Leu Arg Asn Trp Ile Ala Lys Thr Met Glu Ser Thr Val Pro Ile  
                                     100                                      105                                      110  
 Leu Asp Ile Leu Ala Ser Ser Thr Leu Leu Asp Leu Ala Gly Lys Ile  
                                     115                                      120                                      125  
 Ala Ser Lys Ser Arg Val Val His Val Glu Glu  
                                     130                                      135

&lt;210&gt; 44234

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44234

Leu Cys Leu Cys Leu Asp Gly Gly Ala Cys Val Ala Met Val Gly Lys  
 1                                      5                                      10                                      15  
 Asp Cys Val Ala Ile Ala Cys Asp Leu Arg Leu Gly Met Gln Ala Leu  
                                     20                                      25                                      30  
 Thr Val Ser Asn Asn Phe Pro Lys Ile Phe Asn Tyr Gly Pro Ser Thr  
                                     35                                      40                                      45  
 Tyr Leu Gly Leu Ser Leu His Gln Gly Gln Glu Val Lys Arg Ser Arg  
                                     50                                      55                                      60

&lt;210&gt; 44235

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

19991

<400> 44235

```

Lys Lys Lys Lys Lys Lys Lys Ile Tyr Ser Phe Ser Phe Ser Ser Val
1           5           10           15
Asp Gly Leu Pro Ser Arg Phe Gly Leu Leu Phe Pro Tyr Ala Thr Gln
20           25           30
Ile Thr Thr Ser Ala Gln Leu Asn Ser His Asn Lys Glu Lys His Ile
35           40           45
Leu Arg Ser Tyr Asn Thr His Asp Val Tyr Arg Asn Ile Gly Ser Ala
50           55           60
Thr Ile Val Asp
65

```

<210> 44236

<211> 217

<212> PRT

<213> A.fumigatus

<400> 44236

```

Asn Asp Val Ser Met Ile Gln Ala Ala Asp Val Gly Ile Gly Ile Val
1           5           10           15
Gly Lys Glu Gly Arg Gln Ala Ser Leu Ala Ala Asp Phe Ser Ile Thr
20           25           30
His Phe His His Leu Thr Lys Leu Leu Val Trp His Gly Arg Asn Ser
35           40           45
Tyr Lys Arg Ser Ala Lys Leu Ala Gln Phe Ile Met His Arg Gly Leu
50           55           60
Ile Ile Ser Ala Cys Gln Thr Met Tyr Ser Ile Ala Ser His Phe Asp
65           70           75           80
Pro Lys Gly Leu Phe Ile Asn Trp Leu Met Val Gly Tyr Ala Thr Val
85           90           95
Tyr Thr Asn Ala Pro Val Phe Ser Leu Val Phe Asp Arg Asp Val Asp
100          105          110
Glu His Leu Ala Asn Leu Tyr Pro Glu Leu Tyr Lys Glu Leu Lys Ser
115          120          125
Gly Arg Ser Leu Ser Tyr Arg Ser Phe Phe Gly Trp Val Leu Val Ser
130          135          140
Val Tyr Gln Gly Ala Val Ile Gln Gly Leu Ser Gln Ile Leu Leu Asn
145          150          155          160
Thr Ile Ser Gly Pro Arg Leu Ile Ser Val Ser Phe Thr Ala Leu Val
165          170          175
Ile Asn Glu Leu Leu Met Val Ala Ile Ala Ile Thr Thr Trp His Pro
180          185          190
Val Met Ile Phe Cys Leu Ile Gly Thr Ala Leu Val Tyr Val Phe Thr
195          200          205
Thr Gly Leu Glu Gly Ser Ala His Ser
210          215

```

<210> 44237

<211> 181

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (5), (11)

<223> Identity of amino acid sequences at the above locations are unknown.

## 19992

&lt;400&gt; 44237

```

Thr His Ile Asn Xaa Leu Leu Lys Asp Leu Xaa Lys Gly Ala Ser Asn
1          5          10          15
Asp Val Asn Val Leu Ala Trp Ser Pro Asp Gly Thr Lys Phe Ala Ala
          20          25          30
Gly Ala Thr Ala Gln Cys Asp Glu Gly Asn Met Glu Tyr Asn Arg Gly
          35          40          45
Asn Asn Leu Val Ile Gly Asp Leu Thr Cys Asn Arg Leu Glu Glu Val
          50          55          60
Pro Gly His Tyr Ile Ile Arg Pro Pro Gly Arg Ala Ala Ser Gln Arg
65          70          75          80
Ala Leu Ser Asp Asn Arg Leu Phe Met Ser Val Thr Ala Met Gln Trp
          85          90          95
Phe Asp Asp Thr Leu Phe Thr Ala Ser Tyr Asp Asn Thr Val Lys Leu
          100          105          110
Trp Arg Phe Ser Gly Asn His Ile Thr Asn His Lys Thr Leu Pro His
          115          120          125
Glu Ser Lys Val Leu Val Met Ala Arg Ser Asn Phe Glu Lys Asn Leu
          130          135          140
Leu Ala Thr Gly Ala Gln Ser Phe Arg Leu Trp Asn Ile Met Glu Ser
145          150          155          160
Lys Asp Ala Pro Leu Ile Ile Glu Ser Arg Arg Glu Met Thr Pro Thr
          165          170          175
Cys Leu Ala Gly Gly
          180

```

&lt;210&gt; 44238

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44238

```

Pro Thr Thr Thr Pro Phe Ala Ile Asn His Ser Val Gln Arg Ser Arg
1          5          10          15
Val Ile Cys Val Leu Asn Lys Pro Phe Trp Phe Phe Arg Arg Gly Arg
          20          25          30
Phe Gly Arg Asn Leu Pro Ile Leu Ser Ser Pro Ser Ser Cys Leu Phe
          35          40          45
Leu Pro Pro Leu Pro Ser Pro Ser Gly Arg Ala Leu Pro Ser Gln Ser
          50          55          60
Asn Ser Arg Leu Ile Gln Ile Ser Arg Cys Ser Asn Arg Val Val Pro
65          70          75          80
Val Leu Tyr Ile Met Gln Ala Ala Tyr His Glu His Ser Ser Pro His
          85          90          95
Gly Glu Pro Ser Ala Tyr Thr Glu His Met Ala Gln Asp Gln Thr His
          100          105          110
Lys Ala Pro Ile Pro Lys Asn Val Ala Phe Glu Leu Leu Leu Asp Glu
          115          120          125
Asn Ser Lys Val Arg Ala Arg Ile Pro Met Arg Val Gln Ile Tyr Pro
          130          135          140
His Asp Thr Thr Asp Ser Ile Val Thr Thr Val Lys Asn Phe Tyr Gly
145          150          155          160
Ile Tyr Asp Gly Ala Ala Ser Gly Val Ser Phe Glu Asp Glu Asn Gly
          165          170          175
Ile Thr Leu Ile Val Phe Thr Ala Arg Met Arg Arg His Arg Trp Ala

```



## 19993

|       | 180  | 185 | 190 |
|-------|--|-----|-----|
| Ser   |  |     |     |
| <210> | 44239  |     |     |
| <211> | 181  |     |     |
| <212> | PRT  |     |     |
| <213> | A.fumigatus  |     |     |
| <220> |  |     |     |
| <221> | UNSURE   |     |     |
| <222> | (3),(4),(5),(6),(7),(8),(9),(10),(11)                                |     |     |
| <223> | Identity of amino acid sequences at the above locations are unknown. |     |     |

[illegible]

```
<210> 44240
<211> 161
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (29),(34),(158)
<223> Identity of amino acid sequences at the above locations are unknown.
```

```

<400> 44240
Ser Arg Gly Pro Gly Pro Asp Val Leu Val Val Ala Leu Gln Ala Ile
1          5          10
Arg Glu Val Asp Ile Glu Ser Leu Gly Arg Ala Val Xaa Pro Gly Val
          20          25          30
Val Xaa Gly His Ala Gly Pro Ala Glu Val His Pro Gly Ala Val Ala

```

## 19994

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 35  |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |     |     |
| Gly | Gly | Leu | Val | Gly | Leu | Ala | Pro | Ala | Ala | Gly | Ala | Gly | Ala | Glu | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Val | Gly | Val | Asp | Val | Gly | Leu | Val | Val | His | Ala | Val | Glu | Ala | Val |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Ala | Val | Val | Pro | Met | Glu | Val | Val | Tyr | Arg | Pro | Gly | Gly | Asp | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Ala | Ile | Gly | Gly | Cys | Asp | Gly | Leu | Arg | Lys | Gly | Gly | Gly | Gly | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | His | Lys | Ala | Gly | Asp | Glu | Val | Glu | Tyr | Gly | His | Phe | Glu | Gly | Met |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     | 125 |     |     |     |
| Val | Thr | Tyr | Val | Pro | Asp | Arg | Arg | Glu | Lys | Ala | Gly | Gly | Arg | Leu | Ile |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Phe | Ile | Tyr | Ser | Gly | Ser | Gly | Glu | Ile | Lys | Pro | Gly | Thr | Xaa | Gln | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ile |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 44241

 $\langle 211 \rangle$  180

<212> PRT

<213> A.fumigatus

 $\langle 220 \rangle$ 

<221> UNSURE

<222> (17), (141), (146)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44241

[illegible]

<210> 44242

<211> 114

19995

<212> PRT  
<213> A.fumigatus

<400> 44242

```
Pro Arg Gly Pro Gly Ala Lys Gly Arg Lys Arg Gln Thr Arg Ile Val
1          5          10          15
Ala Pro Thr Met Val Ala Phe Ser Gln Leu Leu Leu Leu Leu Pro Ile
          20          25          30
Pro Gly Ala Leu Ala Ser Asn Cys Thr Pro Asp Ser Glu Ala Pro Ile
          35          40          45
Glu Ala Thr Lys Ser Phe Asp Phe Leu Gln His Met Gly Asn Thr Ile
          50          55          60
Phe Asn Thr Thr Asp Ala Ser Leu Asp Arg Arg Asp Ile Thr Leu Arg
65          70          75          80
Thr Ser Gln Asp Gly Val Asn Thr Val Gly Tyr Tyr Tyr Ser Leu Tyr
          85          90          95
Asn Glu Ile Val Leu Ala Leu Ser Ser Pro Gln Gly Arg Arg Thr Ala
          100          105          110
His Gly
```

<210> 44243  
<211> 130  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (112)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44243

```
Gln Pro Asp Ser Ala Phe Ala Met Thr Trp Gly Pro Met Val Trp Ala
1          5          10          15
Ile Val Ala Glu Leu Phe Pro Ser Lys Tyr Arg Ala Lys Gly Met Ala
          20          25          30
Leu Ala Thr Ala Ser Asn Trp Leu Trp Asn Phe Leu Leu Ser Phe Phe
          35          40          45
Thr Pro Phe Ile Thr Gly Ala Ile Asp Phe Ala Tyr Gly Tyr Val Phe
          50          55          60
Ala Gly Cys Leu Leu Val Ala Ala Phe Val Val Tyr Phe Cys Val Ile
65          70          75          80
Glu Gly Lys Gly Arg Thr Leu Glu Glu Ile Asp Trp Met Tyr Val His
          85          90          95
His Val Ala Pro Trp Lys Ser Ser Lys Phe Glu Ile Pro Gln Thr Xaa
          100          105          110
Trp Glu Glu Gly Pro Gly Ala His Ser Arg Lys Glu Glu Gln Ala Phe
          115          120          125
His Ala
          130
```

<210> 44244  
<211> 129  
<212> PRT  
<213> A.fumigatus

## 19996

&lt;400&gt; 44244

```

Glu Pro Cys Ser Phe Gln Pro Cys Gly Gln Tyr Arg Leu Pro Gly Ala
1          5          10          15
Gly Leu Ser Asn Ser Phe Val Thr Ser Val Ile Leu Gly Ala Val Asn
          20          25          30
Phe Val Thr Thr Phe Gly Gly Leu Tyr Val Val Glu Asn Phe Gly Arg
          35          40          45
Arg Lys Ser Leu Ile Phe Gly Ala Gly Phe Met Phe Cys Met Phe Met
          50          55          60
Ile Phe Ala Ser Ile Gly His Phe Met Leu Asp Val Asn Asn Pro Ala
65          70          75          80
Asn Thr Pro Glu Val Gly Lys Gly Met Ile Val Leu Ala Cys Phe Phe
          85          90          95
Ile Ala Tyr Val Pro Pro Phe Phe Phe Phe Phe Phe Ser Leu Phe
          100          105          110
Leu Phe Ser Leu Ser Pro Ser Tyr Thr Asp Asn Leu Ile Val His Ser
          115          120          125
Gln

```

&lt;210&gt; 44245

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (7)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44245

```

Ala Pro Gly Pro Ser Ser Xaa Ser Val Cys Gly Ile Ser Asn Leu Leu
1          5          10          15
Leu Phe His Gly Ala Thr Trp Cys Thr Tyr Ile Gln Ser Ile Ser Ser
          20          25          30
Arg Val Arg Pro Leu Pro Ser Ile Thr Gln Lys Tyr Thr Thr Lys Ala
          35          40          45
Ala Thr Ser Arg Gln Pro Ala Lys Thr Tyr Pro Tyr Ala Lys Ser Met
          50          55          60
Ala Pro Val Met Lys Gly Val Lys Lys Leu Ser Lys Lys Phe Gln Ser
65          70          75          80
Gln Leu Glu Ala Val Ala Arg Ala Met Pro Leu Ala Arg Tyr Leu Glu
          85          90          95
Gly Lys Ser Ser Ala Thr Met Ala Gln Thr Met Gly Pro Gln Val Ile
          100          105          110
Ala Asn Ala Leu Ser Gly Cys Gln Cys Met Met Glu Thr Gly Lys Lys
          115          120          125
Glu Arg Gly Lys Lys Lys Lys Lys Lys Lys Gly Gly His Thr Gln
          130          135          140

```

&lt;210&gt; 44246

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44246

## 19997

Trp Arg Gln Gly Lys Lys Lys Glu Gly Lys Lys Lys Lys Lys Lys Lys  
 1 5 10 15  
 Arg Gly Asp Ile Arg Asn Glu Glu Ala Gly Glu Asp Asp His Ala Phe  
 20 25 30  
 Ala Asp Leu Gly Ser Val Gly Gly Val Val Asp Ile Lys His Glu Val  
 35 40 45  
 Ala Asp Arg Arg Lys Asp His Glu His Ala Glu His Glu Ala Gly Pro  
 50 55 60  
 Glu Asp Glu Gly Leu Ala Ala Ala Lys Val Leu Asp His Val Gln Thr  
 65 70 75 80  
 Ala Lys Gly Gly Asp Glu Val Asp Gly Ala Glu Asp Asp Arg Gly Asp  
 85 90 95  
 Glu Ala Val Gly Glu Pro Gly Ala Trp Lys Thr Val Leu Thr Thr Gly  
 100 105 110  
 Leu Glu Gly Thr Gly Leu Ser  
 115

&lt;210&gt; 44247

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44247

Pro Pro Ala Arg Thr Thr Ala Asp Phe Leu Thr Ser Ile Cys Asp Pro  
 1 5 10 15  
 Asn Ala Arg Gln Phe Gln Pro Gly Arg Glu Ala Ser Thr Pro Lys Thr  
 20 25 30  
 Pro Glu Glu Leu Glu Ala Val Phe Arg Asn Ser Glu Thr Tyr Lys Thr  
 35 40 45  
 Ile Cys Asp Glu Val Ala Ser Tyr Asp Lys Asn Phe Arg Ile Arg Ile  
 50 55 60  
 Arg Arg Ile Pro Ala Ala Ser Arg Arg Thr Leu Pro Asn Val Ser Leu  
 65 70 75 80

&lt;210&gt; 44248

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (4), (13)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44248

Gly Met Thr Xaa Asn Ser Gly Arg Val Arg Thr Thr Xaa Ser Ser Gly  
 1 5 10 15  
 Val Cys Trp Asp Asn Ser Thr Arg Gly Leu Asp Ala Ser Thr Ala Leu  
 20 25 30  
 Asp Tyr Ala Lys Ser Leu Arg Ile Met Thr Asp Val Ser Lys Arg Thr  
 35 40 45  
 Thr Phe Val Thr Leu Tyr Gln Ala Gly Glu Ser Ile Tyr Glu Leu Met  
 50 55 60  
 Asp Lys Val Leu Val Ile Asp Ser Gly Arg Met Leu Tyr Gln Gly Pro  
 65 70 75 80  
 Ala Asn Lys Ala Arg Glu Tyr Phe Val Asn Leu Gly Phe His Cys Pro

## 19998

85 90 95  
 Glu Lys Ser Tyr Val Ser Leu Ser Leu Thr  
 100 105

<210> 44249  
 <211> 156  
 <212> PRT  
 <213> A.fumigatus

<400> 44249  
 Thr Lys Tyr Tyr Leu Asp Asn Gln Leu Ala Asn Pro Leu Gly Arg Ile  
 1 5 10 15  
 Phe Glu Pro Ile Leu Gly Glu Lys Lys Ala Asn Gln Leu Leu Thr Gly  
 20 25 30  
 Glu His Thr Arg Ser Ile Ser Val Ala Ala Pro Thr Leu Gly Gly Leu  
 35 40 45  
 Met Lys Phe Ala Lys Lys Thr Gln Thr Cys Met Gly Cys Lys Lys Pro  
 50 55 60  
 Leu Ser Gly Lys Glu Glu Met Ala Gly Ala Val Cys Ala Leu Cys Arg  
 65 70 75 80  
 Pro Arg Ile Gly Glu Leu Tyr Thr Lys Thr Leu Thr Lys Val Ser Asp  
 85 90 95  
 Leu Glu Ile Arg Phe Gly Arg Leu Trp Thr Gln Cys Gln Arg Cys Gln  
 100 105 110  
 Gly Ser Leu His Cys Glu Val Ile Cys Ser Ser Arg Asp Cys Pro Ile  
 115 120 125  
 Phe Tyr Met Arg Met Lys Ala Lys Lys Asp Val Glu Asp Ala Gln Lys  
 130 135 140  
 Glu Leu Ser Arg Phe Asp Phe Asp Ala Gly Ala Trp  
 145 150 155

<210> 44250  
 <211> 195  
 <212> PRT  
 <213> A.fumigatus

<400> 44250  
 Gly Thr Tyr Leu Thr Gln Gly Arg Arg Ala Thr Phe Ala Asn Ala Leu  
 1 5 10 15  
 Ala Ala Thr Thr Asp Lys Asp Thr Ser Val Lys Gly Ile His His Glu  
 20 25 30  
 Pro Asp Glu Ile Gly Leu Met Thr Asn Leu Phe Leu Asn Val Pro Ala  
 35 40 45  
 Leu Ala Ala Thr Ala Leu Asp Tyr Arg Pro His Leu Ile Leu Phe Asn  
 50 55 60  
 Ala Pro Phe Ala Ala Val Glu Leu Ile Glu Lys Arg Ile Thr Asn Ser  
 65 70 75 80  
 Leu Gln Asp Pro Asn Leu Val Gly Thr Val Gly Arg Leu Gln Thr Ala  
 85 90 95  
 Leu Asp Glu Pro Ala Glu Arg Gly Asn Ala Asp Thr Ser Ala Asp Glu  
 100 105 110  
 Glu His Gly Thr Val Gly Gly Lys Ser Leu Gly Gln Arg Ile Gly His  
 115 120 125  
 Gln Ala Thr Glu His Gly Asn Val Glu Ile Gln Ile Pro Gly Ile Asp  
 130 135 140  
 Ala Leu Pro Leu Arg Ile Asp Asp Leu Ser Gly Glu Pro Phe Lys Ile

## 19999

145                      150                      155                      160  
 Ser Gly Ser Asp Ser Gly Pro Ser Thr Ala Pro Pro Val Leu Gly Phe  
                                  165                      170                      175  
 Arg His Arg His Cys Asn Leu Asn Glu Ser Thr Ala Leu Gly Ile Leu  
                                  180                      185                      190  
 Pro Leu Ala  
                                  195

<210> 44251

<211> 278

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (37), (43), (44), (52), (53), (54), (65), (71)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44251

Ala Pro Glu Pro Lys Gly Glu Glu Asp Thr Ser Cys Ser Phe Leu Gln  
 1                      5                      10                      15  
 Pro Arg Gly Gln Val Leu Ser Gly Ile Ser Ala Arg Gly His Thr Ser  
                                  20                      25                      30  
 Pro Phe Pro Gln Xaa Leu Gln Ala Phe Pro Xaa Xaa Gln Pro Pro Val  
                                  35                      40                      45  
 Asp His Leu Xaa Xaa Xaa Leu His Thr Val Met Pro Arg Leu Tyr Ser  
                                  50                      55                      60  
 Xaa Ser Gln Asp Pro Leu Xaa Ser Cys Gln Arg Gln Asp Thr Lys Cys  
 65                      70                      75                      80  
 Arg Arg Leu Ile Glu Ile Ala Val Ser Val Ala Glu Thr Glu Asp Trp  
                                  85                      90                      95  
 Arg Gly Gly Thr Arg Thr Gly Val Gly Ser Gly Tyr Leu Glu Arg Leu  
                                  100                      105                      110  
 Ala Arg Gln Val Ile Asp Ala Glu Arg Lys Gly Ile Asp Pro Arg Asn  
                                  115                      120                      125  
 Leu Asp Leu His Val Pro Met Phe Arg Gly Leu Met Ala Asn Pro Leu  
                                  130                      135                      140  
 Ala Lys Arg Phe Ala Ser Asp Gly Pro Met Leu Leu Ile Gly Ala Gly  
 145                      150                      155                      160  
 Val Gly Ile Ala Pro Phe Arg Gly Phe Val Gln Arg Arg Leu Gln Ser  
                                  165                      170                      175  
 Ala Asn Cys Ala Asn Lys Val Trp Val Leu Gln Gly Ile Arg Asp Ser  
                                  180                      185                      190  
 Leu Leu Asp Glu Leu Tyr Ser Gly Glu Trp Gly Val Glu Glu Asp Lys  
                                  195                      200                      205  
 Val Arg Thr Val Val Gln Ser Arg Arg Gly Glu Ser Arg Tyr Val Gln  
                                  210                      215                      220  
 Glu Glu Val Arg His Gln Ala Asp Leu Val Trp Phe Val Met Asn Ala  
 225                      230                      235                      240  
 Leu Asp Gly Arg Val Phe Val Cys Gly Ser Ser Lys Gly Ile Gly Glu  
                                  245                      250                      255  
 Gly Ser Ala Ala Leu Cys Glu Ile Ser Ala Leu His Ala Gly Asp  
                                  260                      265                      270  
 Glu Glu Ser Val Gly Ala  
                                  275

## 20000

&lt;210&gt; 44252

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (27)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44252

```

Glu Cys Leu Trp Glu Ala Pro Gly Tyr Met Leu Ser Ser Tyr Pro Leu
1          5          10          15
Lys Ser Trp Tyr His Asp Ile Ala Gln Gly Xaa Asp Leu Gly Gly Leu
          20          25          30
Phe His Asp Ile Leu Gly Ile Gln Asp Ala Gly Val Asp Asp Phe Leu
          35          40          45
Leu Glu Leu Glu Trp Arg Lys Asp Ser Thr Asp Val Glu Tyr Asp Leu
          50          55          60
Val Tyr Asp Leu Tyr Gln Glu Leu Asn Ala Arg Arg Leu Gly Met Asp
65          70          75          80
Asp Lys Thr Val Lys Lys Ile Arg
          85

```

&lt;210&gt; 44253

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44253

```

Ser Asp Ile Val Ser Ser His Ala Val Tyr Asn Ile Leu Ala Arg Glu
1          5          10          15
Arg Pro Asp Val Leu Lys Thr Leu Thr Gln Pro Ile Trp Tyr Phe Asp
          20          25          30
Arg Lys Gly Glu Thr Ser Lys Gly Gln Asp Glu Tyr Ile Arg Thr Ser
          35          40          45
Val Met Tyr Leu Glu Arg Gly Glu Asn Pro Arg Val Tyr Thr Lys Tyr
          50          55          60
Gly Pro Pro Phe Leu Ala Leu Arg Arg Met Asn
65          70          75

```

&lt;210&gt; 44254

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44254

```

Trp Leu Leu Trp Ser Arg Trp Asp Pro Tyr Tyr Val Arg Ser Leu Thr
1          5          10          15
Arg Phe Ser Asp Ala Gly Ile Ile Pro Pro Leu Ser Ala Ala Gln Leu
          20          25          30
Glu Ala Leu Gln Val Leu Glu Asp Thr Cys Leu Gln Asn Ala Leu His
          35          40          45
Met Val Leu Glu Val Gly Asp Ile Gln Phe Leu Ala Asn Ser His Val
          50          55          60
Leu His Ala Arg Thr Ala Tyr Lys Asp His Ala Pro Pro Ala Pro Arg

```



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09/417507  
10/14/99

```
<210> 44255
<211> 65
<212> PRT
<213> A.fumigatus
```

```

<400> 44255
Asn Leu Tyr Leu Phe Phe Ser Ser Lys Met Arg Gly Lys Leu His Ile
 1          5          10          15
Val Pro Ser Met Glu Tyr Asn Pro Ser Asn Glu Thr Arg Ile Phe Phe
      20          25          30
Xaa Gly Xaa Trp Val Xaa Gly Leu Ala Cys Lys Ile Ala Ser Arg Xaa
      35          40          45
Ser Leu Ser Lys Phe Ala Ile Leu Val Trp Gly Lys Glu Leu Asp Gly
      50          55          60
Asn
65

```

```
<210> 44256
<211> 284
<212> PRT
<213> A.fumigatus
```

```
<220>
<221> UNSURE
<222> (18),(28),(31),(32),(273),(277),(278)
<223> Identity of amino acid sequences at the above locations are unknown.
```

|       |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> | 44256 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Leu   | Pro   | Ser | Ser | Ser | Phe | Pro | His | Thr | Asn | Met | Ala | Asn | Leu | Glu | Arg |
| 1     |       |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu   | Xaa   | Arg | Glu | Ala | Ile | Leu | Gln | Ala | Asn | Pro | Xaa | Thr | His | Xaa | Xaa |
|       |       |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Trp   | Lys   | Lys | Ile | Leu | Val | Ser | Phe | Glu | Gly | Leu | Tyr | Ser | Met | Glu | Gly |
|       |       | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr   | Met   | Cys | Asn | Leu | Pro | Arg | Ile | Leu | Glu | Leu | Lys | Lys | Arg | Tyr | Lys |
|       | 50    |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe   | Tyr   | Phe | Phe | Val | Asp | Glu | Ala | His | Ser | Ile | Gly | Ala | Ile | Gly | Leu |
| 65    |       |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Arg   | Gly   | Arg | Gly | Val | Cys | Asp | Phe | Phe | Lys | Val | Asp | Pro | Ala | Glu | Val |
|       |       |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp   | Ile   | Phe | Met | Gly | Thr | Phe | Thr | Lys | Ser | Phe | Gly | Ala | Asn | Gly | Gly |
|       |       |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Tyr   | Ile   | Ala | Ala | Asp | Lys | Ala | Leu | Ile | Lys | Lys | Leu | Arg | Ala | Thr | Asn |
|       |       | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala   | Gly   | Gln | Val | Phe | Gly | Glu | Ala | Pro | Ala | Pro | Ala | Val | Leu | Ala | Gln |

## 20002

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ser | Ser | Ser | Leu | Arg | Leu | Ile | Ala | Asp | Glu | Asp | Pro | Gln | His | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Gln | Gly | Leu | Glu | Arg | Val | Gln | Arg | Leu | Gly | Phe | Asn | Ser | Arg | Tyr |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | Arg | Leu | Gly | Leu | Lys | Arg | Leu | Gly | Phe | Ile | Val | Tyr | Gly | His | Asp |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | Ser | Pro | Ile | Val | Pro | Leu | Met | Leu | Tyr | Asn | Pro | Ala | Lys | Met | Pro |
|     |     | 195 |     |     |     |     | 200 |     |     |     | 205 |     |     |     |     |
| Ala | Phe | Ser | His | Glu | Met | Leu | Arg | Arg | Lys | Ile | Ser | Val | Val | Val | Val |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Thr | Tyr | Pro | Ala | Thr | Pro | Leu | Glu | Leu | Ser | Arg | Ala | Arg | Leu | Cys | Val |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Ala | Ala | His | Thr | Lys | Asp | Asp | Leu | Asp | His | Ile | Leu | Arg | Val | Cys |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Asp | Glu | Ile | Gly | Asn | Thr | Leu | Gly | Leu | Thr | Tyr | Ser | Thr | Gly | Gly | Cys |
|     |     |     | 260 |     |     |     | 265 |     |     |     |     |     | 270 |     |     |
| Xaa | Thr | Arg | Pro | Xaa | Xaa | Ala | Arg | Asn | Gly | Arg | Gly |     |     |     |     |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     |     |     |     |

<210> 44257

<211> 238

&lt;212&gt; PRT

<213> A.fumigatus

<400> 44257

|            |            |            |            |            |     |     |            |            |            |            |            |           |            |            |            |
|------------|------------|------------|------------|------------|-----|-----|------------|------------|------------|------------|------------|-----------|------------|------------|------------|
| Leu<br>1   | Pro        | Val        | Gly        | Tyr<br>5   | Thr | Thr | Val        | Ala        | Leu<br>10  | Ser        | Gln        | Thr       | Ile        | Ser<br>15  | Gly        |
| Lys        | Leu        | Pro        | Ser<br>20  | Asn        | Leu | Ala | Pro        | Pro<br>25  | Pro        | Ala        | Pro        | Thr<br>30 | Asn        | Ala        | Pro        |
| Lys        | Asn<br>35  | Leu        | Lys        | Leu        | Leu | Ser | Arg<br>40  | Val        | Asn        | Leu        | Met<br>45  | Leu       | Ser        | Asp        | Pro        |
| Ala        | Gln<br>50  | Asn        | Gln        | Arg        | Leu | Ala | Ser<br>55  | Leu        | Ala        | Gln        | Val<br>60  | Tyr       | Asp        | Leu        | Val        |
| Ala<br>65  | Leu        | Arg        | Pro        | Thr<br>70  | Asn | Glu | Lys        | Ala        | Leu        | Leu<br>75  | Asn        | Ala       | Cys        | Thr        | Asn<br>80  |
| Leu        | Glu        | Cys        | Asp<br>85  | Leu        | Ile | Ser | Leu        | Asp<br>90  | Leu        | Ser        | Val        | Arg       | Leu        | Pro<br>95  | Phe        |
| Tyr        | Phe        | Lys        | Phe<br>100 | Lys        | Met | Leu | Ser        | Ala<br>105 | Ala        | Ile        | Glu        | Arg       | Gly<br>110 | Val        | Arg        |
| Leu        | Glu        | Ile<br>115 | Cys        | Tyr        | Gly | Pro | Gly<br>120 | Val        | Thr        | Gly        | Ser<br>125 | Gly       | Leu        | Glu        | Ala        |
| Arg        | Arg<br>130 | Asn        | Leu        | Ile        | Gly | Asn | Ala<br>135 | Met        | Ser        | Leu        | Ile<br>140 | Arg       | Ala        | Thr        | Arg        |
| Gly<br>145 | Arg        | Gly        | Ile        | Val<br>150 | Val | Ser | Ser        | Glu        | Ala        | Lys<br>155 | Arg        | Ala       | Leu        | Gly        | Val<br>160 |
| Arg        | Ala        | Pro        | Trp<br>165 | Asp        | Val | Ile | Asn        | Leu        | Thr<br>170 | Cys        | Val        | Trp       | Gly        | Leu<br>175 | Ser        |
| Gln        | Glu        | Leu        | Gly<br>180 | Lys        | Glu | Ala | Ile        | Ser<br>185 | Glu        | Glu        | Ala        | Arg       | Lys<br>190 | Val        | Thr        |
| Ala        | Leu<br>195 | Ala        | Lys        | Leu        | Lys | Arg | Thr<br>200 | Ser        | Trp        | Arg        | Gly<br>205 | Val       | Ile        | Asp        | Ile        |
| Val        | Asp<br>210 | Gly        | Gly        | Gln        | Met | Ser | Lys<br>215 | Ser        | Gln        | Val        | Met<br>220 | Glu       | Ser        | Gly        | Met        |
| Gly<br>225 | Gln        | Lys        | Gly        | Met<br>230 | Ser | Lys | Lys        | Asn        | Ser        | Arg<br>235 | Arg        | Val       | Arg        |            |            |

20003

<210> 44258

<211> 208

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (155),(182),(190)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44258

```
Arg Pro Glu Lys Ser Trp Pro Thr Ser Ile Leu Phe Ile Asp Lys Leu
1          5          10          15
Arg Pro Tyr Val Lys Ser Met Ala Leu Arg Tyr Val Leu Val Gly Leu
20        25        30
Lys Gln Asn His Thr Leu Gln Leu Trp Asp Ile Gly Leu Gly Lys Ala
35        40        45
Val Gln Glu Leu Lys Phe Pro His Glu Asn Glu Ser Asp Ala Ile Cys
50        55        60
Ser Val Ala Tyr His Ala Ala Ser Gly Ile Ile Val Val Gly His Pro
65        70        75        80
Thr Arg Asn Ser Ile Tyr Phe Val His Leu Ser Ala Pro Arg Tyr Asn
85        90        95
Leu Gln Pro Met Ser Gln Ala Ser Phe Ile Lys Arg Ser Gly Glu Lys
100       105       110
Asp Ser Ser Leu Pro Lys Pro Glu Ser Thr Ala Cys Met Ser Gly Ile
115       120       125
Arg Glu Ile Ser Phe Ala Ser Lys Gly Gln Leu Arg Ser Leu Asp Leu
130       135       140
Leu Pro Ala Ile Lys Ala Pro Gly Asp Ser Xaa Glu Asn Ser Ala Leu
145       150       155       160
Phe Glu Leu Tyr Val Met His Ser Arg Gly Val Thr Cys Leu Thr Ile
165       170       175
Lys Lys Glu Asp Leu Xaa Trp Gly Val Asp Asn Lys Asn Xaa Arg Pro
180       185       190
Val Asn Ala Leu Glu Glu Gly Tyr Ile Glu Ile Ser Glu Leu Gln Ala
195       200       205
```

<210> 44259

<211> 72

<212> PRT

<213> A.fumigatus

<400> 44259

```
Arg Pro Ser Pro Val His Ser Pro Ser Leu Thr Ala Ser Lys Trp Trp
1          5          10          15
Ile Gly Ser Leu Gly Arg Ser Ala Tyr His Ala Val Val Met Ala Gln
20        25        30
Leu Phe Ile Ala Gly Lys Asn Tyr Gly Pro His Pro Phe Ile Val Gln
35        40        45
Ile Arg Asp Leu Glu Thr His Gln Pro Leu Glu Asn Ile Tyr Val Gly
50        55        60
Asp Ile Gly Pro Lys Phe Gly Tyr
65        70
```

20004

<210> 44260  
<211> 74  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (11), (12), (13)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44260  
Ile Pro Phe Leu Glu Ala Arg Pro Val Gln Xaa Xaa Xaa Gly Asn Gly  
1 5 10 15  
Met Cys Lys Ser Ala Ile Gln Lys Arg Ile Ser Val Arg Gly Ser Asn  
20 25 30  
Gly Glu Lys Asp His Phe Arg Tyr Leu Ser Val Pro Asp Ser Glu Leu  
35 40 45  
Ile Glu Tyr Ala Gln Gly Leu Leu Ser Gly Tyr Leu Glu Glu Ala  
50 55 60  
Phe Met Tyr Val Ile Glu Trp Glu Trp Lys  
65 70

<210> 44261  
<211> 218  
<212> PRT  
<213> A.fumigatus

<220>  
<221> UNSURE  
<222> (200)  
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44261  
Phe Gly Val Glu Met Gly Gly Thr Thr Ala Val Phe Lys Ala Leu Trp  
1 5 10 15  
Lys Thr Leu Trp Gln Tyr Phe Ala Gly Ile Gly Ile Pro Gly Trp Gln  
20 25 30  
Leu Ile Arg Gln Asp Tyr Asn Leu Asn Phe Glu Thr Tyr Val Pro His  
35 40 45  
Ser Ile Asn Trp Ala Trp Gly Ser Met Val Pro Glu Tyr Asp Ala Val  
50 55 60  
Ala Arg Lys Ala Ile Glu Leu Ile Ala Pro Ile Pro Leu Glu Gly Ser  
65 70 75 80  
Val Pro Asp Ala Thr Val Arg Glu Val Ile Glu Phe Ser Asn Ser Val  
85 90 95  
Lys Arg Val Ala Val Asp Ser Asn Arg Phe Asn Phe Arg Trp Asp Gly  
100 105 110  
Leu Leu Arg Tyr Tyr Asp Ile Phe Leu Asn Tyr Asp Glu Lys Lys Asn  
115 120 125  
Trp Lys Asp Val Phe Ser Arg Gln Cys Lys Gly Cys Gly Ala Trp Leu  
130 135 140  
Val Cys Arg Pro Asp Trp Arg Lys Cys Tyr Ser Cys Gly Lys Glu Arg  
145 150 155 160  
Thr Glu Glu Glu Ala Ala Ile Ala Trp Asn Pro Pro Leu Ala Val Asp  
165 170 175  
Glu Val Lys Ala Leu Val Arg Ala Ser Asp Ala Lys Pro Ala Ser Arg

## 20005

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     | 180 |     | 185 |     | 190 |
| Ala | Ala | Lys | Glu | Arg | Ala |
|     | 195 |     | 200 |     | 205 |
| Val | Val | Ser | His | Ala | Val |
|     | 210 |     | 215 |     |     |

<210> 44262  
 <211> 133  
 <212> PRT  
 <213> A.fumigatus

<400> 44262

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Trp | Ile | Ser | Thr | Ala | Gly | Glu | Tyr | Ala | Arg | Phe | His | Asp | Arg | Glu |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Gly | Asp | Lys | Lys | Thr | Asn | Arg | Gln | Thr | Leu | Pro | Val | Ile | Val | Gly | Pro |
|     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Arg | Trp | His | Gly | Ala | Leu | Arg | Trp | Ala | Thr | Ala | Leu | Leu | Val | Met | Gly |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Thr | Gly | Ile | Met | Pro | Leu | Cys | Ile | Thr | Gly | Lys | Leu | Val | Trp | Asn | Gly |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gln | Asp | Thr | Gly | Phe | Arg | Asn | Lys | Arg | Trp | Ile | Tyr | Thr | Gly | Thr | Val |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |
| Ile | Thr | Ala | Ile | Leu | His | Val | Val | Phe | Ala | Ser | Leu | Ser | Gly | Leu | Arg |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Cys | Ala | Phe | Ser | Trp | Gly | Glu | Ala | Ala | Tyr | Asp | Arg | Gln | Thr | Tyr | Lys |
|     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Arg | Phe | Tyr | Met | Leu | Ala | Ala | Tyr | Thr | Met | Val | Cys | Tyr | Leu | Ser | Phe |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Ala | Tyr | Leu | Thr | Ala |     |     |     |     |     |     |     |     |     |     |     |
|     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 44263  
 <211> 153  
 <212> PRT  
 <213> A.fumigatus

<400> 44263

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | His | Val | Ala | Gln | Cys | Cys | Thr | Leu | Phe | Leu | Ser | Leu | Asn | Val | His |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Glu | Gly | His | Pro | Lys | Ser | Met | Thr | Lys | Val | Ile | Ile | Ala | Gly | Val | Thr |
|     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Gly | Phe | Val | Gly | Gln | Glu | Val | Leu | Ser | Gln | Cys | Leu | Ala | His | Pro | Ser |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ile | Thr | Ser | Ile | Val | Ala | Leu | Cys | Arg | Arg | Glu | Leu | Pro | Thr | Thr | His |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Pro | Lys | Leu | His | Val | His | Gly | Thr | Gln | Glu | Arg | Asp | Phe | Leu | Ser | Tyr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |
| Ser | Asp | Pro | Gln | Leu | Thr | Ala | Ser | Leu | Arg | Gly | Ala | Gly | Ser | Cys | Ile |
|     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |     |
| Trp | Thr | Pro | Gly | Ile | Thr | Pro | Ser | Arg | Ala | Ser | Asp | Glu | Gln | Thr | Leu |
|     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |     |
| Arg | Pro | Val | Thr | Leu | Glu | Leu | Tyr | Ser | Gln | Ala | Ala | Lys | Gly | Phe | Gln |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Gln | Cys | Leu | Tyr | Cys | Phe | Gln | Met | Lys | Ala | Asn | Lys | Glu | Ala | Leu | Pro |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Ser | Lys | Phe | Pro | Phe | Gly | Val | Cys |     |     |     |     |     |     |     |

145

150

&lt;210&gt; 44264

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (6), (8), (21)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44264

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Thr | Val | Phe | Xaa | Xaa | Ala | Xaa | Asp | Ser | Phe | Val | Ser | Gly | Val | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Gly | Gly | Phe | Xaa | Thr | Ala | Ser | Thr | Tyr | Pro | Leu | Asp | Leu | Leu | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Arg | Phe | Ala | Ala | Gln | Gly | Thr | Glu | Arg | Ile | Tyr | Thr | Ser | Leu | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Ser | Val | Arg | Asn | Ile | Ala | Arg | Ser | Glu | Gly | Pro | Ala | Gly | Phe | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Gly | Cys | Ser | Ala | Ala | Val | Gly | Gln | Ile | Val | Pro | Tyr | Met | Gly | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Phe | Phe | Ala | Thr | Tyr | Glu | Ser | Leu | Arg | Pro | Val | Leu | Ser | Gly | Leu | Glu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Met | Pro | Phe | Gly | Ser | Gly | Asp | Ala | Ala | Ala | Gly | Val | Ile | Ala | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Leu | Ala | Lys | Ser | Gly | Val | Phe | Pro | Leu | Asp | Leu | Val | Arg | Lys | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Gln | Val | Gln | Gly | Pro | Thr | Arg | Thr | Leu | Tyr | Val | His | Arg | Asn | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Glu | Tyr | Arg | Gly | Val | Phe | Ser | Thr | Ile | Ala | Met | Ile | Val | Arg | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gln | Gly | Val | Arg | Gly | Leu | Tyr | Arg | Gly | Leu | Thr | Val | Ser | Leu | Ile | Lys |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala | Ala | Pro | Ala | Ser | Ala | Ile | Thr | Met | Trp | Thr | Tyr | Glu | Arg | Ser | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |
| Lys | Leu | Leu | Arg | Asp | Phe | Arg | Val | Ala | Glu |     |     |     |     |     |     |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     |     |     |     |     |

&lt;210&gt; 44265

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44265

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ile | Thr | Lys | Asp | Cys | Cys | Ala | Thr | Val | Gly | Met | Ala | Ala | Asn | Arg |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | His | Gln | Tyr | Arg | Gln | Leu | Gly | Lys | Ala | Gly | Arg | Ala | Arg | Trp | Leu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn | Ile | Gly | Pro | Thr | Val | Arg | Gly | Val | Ala | Met | Asp | Ala | Ala | Asp | His |
|     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | His | Gly | Gly | Gly | Arg | Gly | Lys | Ser | Lys | Gly | Asn | Val | Asp | Pro | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Pro | Trp | Gly | Leu | Pro | Val | Cys | Thr | Cys | Val | Ile | Ala | Gly | Leu | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |

20007

Ala Leu

<210> 44266

<211> 96

<212> PRT

<213> A.fumigatus

<400> 44266

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Val | Leu | Leu | Leu | Phe | Ser | Ser | Ser | Leu | Tyr | Ser | Ser | Ile | Leu | Met |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Lys | Cys | Gly | Gly | Trp | Val | Leu | Arg | Ser | His | Cys | Ile | Ile | Phe | Cys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Asp | Ser | Gly | Ala | Arg | His | Ala | Val | Phe | Asp | Ile | Leu | Gln | Thr | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Cys | Asp | Tyr | Tyr | Leu | Ala | Val | Met | Asp | Asp | Arg | Leu | Tyr | Phe | His | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Phe | Ala | Met | Ala | Ile | Thr | Phe | Met | Arg | Ser | Lys | Tyr | Thr | Glu | Phe | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Glu | Lys | Asp | Leu | Phe | Val | Tyr | Thr | Pro | Gly | Trp | Thr | Ile | Arg | Arg |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |

<210> 44267

<211> 139

<212> PRT

<213> A.fumigatus

<400> 44267

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ile | Ala | Asp | Gln | Phe | Leu | Ser | Leu | Val | Leu | Ala | Asp | Ile | Ser | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Thr | Gly | Leu | Pro | Asn | Phe | Arg | Phe | Lys | Leu | Pro | Ser | Arg | Asn | Trp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Met | Ile | Phe | Phe | Thr | Ile | Thr | Gly | Ser | Leu | Thr | Ala | Ala | Ile | Val | Tyr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Arg | Arg | Glu | Arg | Arg | Arg | Val | Gln | Gln | Lys | Trp | Cys | Asp | Leu | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | His | Leu | Ser | Lys | Glu | Thr | Leu | Pro | Ile | Glu | Gln | Thr | Arg | Arg | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Thr | Ile | Phe | Leu | Ser | Ala | Pro | Pro | Gly | Asp | Gly | Leu | Arg | Ile | Ala |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Glu | His | Phe | Lys | Glu | Tyr | Val | Lys | Pro | Ile | Leu | Val | Ala | Ala | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Asp | Tyr | Thr | Val | Ile | Glu | Gly | Arg | Arg | Glu | Gly | Asp | Val | Arg | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Leu | Val | Phe | Thr | Thr | Ala | Glu | Asn | Pro | Pro |     |     |     |     |     |
|     |     | 130 |     |     |     |     | 135 |     |     |     |     |     |     |     |     |

<210> 44268

<211> 279

<212> PRT

<213> A.fumigatus

<220>

<221> UNSURE

<222> (7), (9)

<223> Identity of amino acid sequences at the above locations are unknown.

20008

<400> 44268

```

Ala Trp Ile Trp Pro Arg Xaa Asp Xaa Ile Tyr Asn Gly Pro Glu Arg
1          5          10          15
Ser Cys Arg Ala Tyr Asp Arg Asp Leu Val Ser Val Ala Lys Lys Arg
          20          25          30
Gly Phe Ser Tyr Leu Asp Asp Arg Lys Gly Phe Asp Ser Leu Asn Gly
          35          40          45
Gly Ser Glu Ala Lys Leu Pro Leu Leu Gly Leu Phe Ala Glu Lys Asp
          50          55          60
Ile Pro Phe Glu Ile Asp Arg Arg Asn Gln Asn Asp Val Tyr Pro Ser
65          70          75          80
Leu Glu Glu Met Ala Arg Thr Ala Leu Lys Ile Leu Ser Asp Ala Thr
          85          90          95
Ala Asp Ser Glu Gln Gly Phe Phe Leu Met Ile Glu Gly Ser Arg Ile
          100          105          110
Asp His Ala Gly His Gly Asn Asp Pro Ala Ala Gln Val His Glu Val
          115          120          125
Ile Ala Tyr Asp Lys Ala Phe Ala Ala Val Leu Asp Phe Leu Gly Lys
          130          135          140
Asp Ser Thr Pro Gly Val Val Val Ser Thr Ser Asp His Glu Thr Gly
145          150          155          160
Gly Leu Ala Ala Ala Arg Gln Leu His Thr Ser Tyr Pro Glu Tyr Lys
          165          170          175
Trp Leu Pro Gly Val Leu Ala Asn Ala Ser His Ser Thr Glu Tyr Ile
          180          185          190
Asp Asn Lys Leu Arg Glu Phe Leu Ser Thr Glu Thr Glu Lys Asn Lys
          195          200          205
Gln Gln His Tyr Val Arg Glu Leu Leu Glu Lys Gly Leu Ser Ile Thr
          210          215          220
Asp Ala Thr Asp Glu Glu Ile Asp Ser Ile Leu Asp Pro Asn Ser Pro
225          230          235          240
Val Ser Ser Gln Tyr Gln Leu Ala Asp Leu Ile Ile Pro Lys Ala Gln
          245          250          255
Ile Gly Trp Ser Thr His Gly Pro Ser Gly Lys Phe Gln Ala Leu Tyr
          260          265          270
His Gly Pro Met Glu Ile Arg
          275

```

<210> 44269

<211> 114

<212> PRT

<213> A.fumigatus

<400> 44269

```

Tyr Arg Leu Arg Leu Gly Glu Trp Gly Phe Trp Cys Leu Gly Val Gln
1          5          10          15
His Arg Leu Val Thr Leu Ile Thr Leu Phe Ala Leu Val Pro Leu Leu
          20          25          30
Leu Phe Ile Val Leu Ala Ala Leu Ile Tyr Arg Gln Ala Gly Arg Val
          35          40          45
Trp Ile Gly Phe Ser Gln Pro Gly Ile Cys Gly Ala Phe His Arg Thr
          50          55          60
Gly Ala Arg Thr Val Asn Lys Arg Ser Ile Ser Pro Ile Ser Trp Arg
65          70          75          80
Glu His Asp Leu Leu Pro Ala Ser Leu Pro Lys Thr Leu Gly Leu Ala

```



## 20009

85 90 95  
 Leu Gly Arg Arg Trp Ala Cys Phe His Thr Arg Arg Leu Glu Gly Pro  
 100 105 110  
 Thr Met

&lt;210&gt; 44270

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (10)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44270

Ile Phe Gly Pro Ser Gly Gly Leu Leu Xaa Ser Arg Ser Ser Leu Cys  
 1 5 10 15  
 Pro Lys Leu Gly Thr Trp Thr Ser Arg His Gly Arg Val Val Ile Val  
 20 25 30  
 Gly Asp Ala Ala His Ala Ile Pro Pro Ala Ala Gly Gln Gly Val Asn  
 35 40 45  
 Gln Ala Phe Glu Asp Val Phe Thr Tyr Ser Leu Met Leu Gly Arg Ser  
 50 55 60  
 Asp Lys Asp Ala Leu Ala Arg Ser Leu Lys Val Trp Gln Thr Arg Arg  
 65 70 75 80  
 Gln Glu Arg Ile Asp Lys Val Leu Ala Leu Asn Thr Tyr Met Glu Arg  
 85 90 95  
 Arg Arg Val Pro Ser Leu Glu Glu Glu Lys Asp Ala Glu Asp Ala Pro  
 100 105 110  
 Leu Asp Phe Ala Ser Leu Tyr Lys Pro Asp Phe Val Glu Ile Val Asp  
 115 120 125  
 Thr Trp Leu Ser Lys His Thr Ser Cys  
 130 135

&lt;210&gt; 44271

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44271

Ile Ile Thr His Ile Thr Trp Tyr Arg Gln Ser Leu Val Gly Ser Arg  
 1 5 10 15  
 Pro Ser Gly Lys Ala Trp Gly Leu Pro Ala Ser Arg Leu Pro Ile Thr  
 20 25 30  
 Thr Thr Glu Cys Ala Arg Ser Val Tyr Ile Ala His Lys Cys Ser Ser  
 35 40 45  
 Glu Gly Ala Ile Arg Val Tyr Glu Leu Asp Glu Lys Thr Ser Ala Phe  
 50 55 60  
 Arg Gly Ser  
 65

&lt;210&gt; 44272

&lt;211&gt; 103

&lt;212&gt; PRT

## 20010

&lt;213&gt; A.fumigatus

&lt;400&gt; 44272

```

Leu Ala Arg Leu Pro Gly Gly Val Asn Ile Val Gly Arg Asp Gln Ser
1          5          10          15
Ala Arg Asn Cys Gln Val Ala Pro His Lys Cys Glu Arg Ile Asn Leu
          20          25          30
Phe Ser Gly Lys Pro Cys Asn Ser Val Phe Ser Arg Pro Tyr Asp Phe
          35          40          45
Thr Arg His Gly Asp Thr Ile His Tyr Ala Arg Lys Gln Lys Val Arg
          50          55          60
Cys His Leu Cys Thr Glu Glu Lys Thr Phe Ser Arg Asn Asp Ala Leu
65          70          75          80
Thr Arg His Met Arg Val Val His Pro Glu Val Asp Trp Arg Gly Lys
          85          90          95
Gln Arg Arg Arg Gly Arg Asp
          100

```

&lt;210&gt; 44273

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44273

```

Thr Asp His Glu Thr Cys His Val Ile Ser Val Tyr Ile His Pro Leu
1          5          10          15
Ser Thr Tyr Pro Asn Thr Asp Ser Pro Thr Asn Lys Leu Asn Asn Thr
          20          25          30
Ser Gln Asp Glu Pro Ala Phe Ala Ala Ser Gln Ile Ile Tyr Arg Gly
          35          40          45
Val Leu Arg Ile His His Ser Pro Val Phe Val Pro Met Pro
          50          55          60

```

&lt;210&gt; 44274

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (7)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44274

```

Val Ala Gly Ser Phe Ser Xaa Pro Trp Arg Glu Lys Cys Asn Cys Arg
1          5          10          15
Ala Ser Arg Ser Phe Pro Phe Val Ser Lys Val Met Gly Val Asp Leu
          20          25          30
Ile Glu Met Ala Thr Lys Ala Met Ile Gly Lys Pro Phe Ala Glu Tyr
          35          40          45
Pro Pro Val Thr Ile Pro Lys Asn Tyr Val Gly Val Lys Val Pro Gln
          50          55          60
Phe Ser Phe Ser Arg Leu Ser Gly Ala Asp Pro Val Leu Gly Val Glu
65          70          75          80
Met Ala Ser Thr Gly Glu Val Ala Ser Phe Gly Arg Asp Lys Tyr Glu
          85          90          95

```

## 20011

Ala Tyr Leu Lys Ala Leu Ile Ser Thr Gly Phe Arg Leu Pro Lys Lys  
 100 105 110  
 Asn Val Leu Phe Ser Ile Gly Ser Tyr Lys Glu Lys Met Glu Met Leu  
 115 120 125  
 Pro Ser Ile Lys Lys Leu His Gln Leu Gly Phe Asn Leu Phe Ala Thr  
 130 135 140  
 Ser Gly Thr Ala Asp Phe Leu Lys Glu His Gly Val Pro Val Lys Tyr  
 145 150 155 160  
 Leu Glu Val Leu Pro Gly Gln Glu Asp Asp Leu Lys Ser Glu Ser Ser  
 165 170 175  
 Leu Thr Gln His Leu Ala Asn Asn Leu Ile Asp Leu Tyr Ile Asn Leu  
 180 185 190  
 Pro Ser Asn Asn Arg Phe Arg Arg Pro Ala Asn Tyr Met Ser Lys Ser  
 195 200 205  
 Tyr Arg Thr Arg Arg Met Ala Val Asp Tyr Gln Thr Leu Leu Gly Thr  
 210 215 220  
 Thr  
 225

&lt;210&gt; 44275

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44275

Lys Pro Xaa Lys Arg Pro Asn Pro Arg Thr Gly Ala Asp Pro Pro Val  
 1 5 10 15  
 Val Val Arg Gly Ala Leu Tyr Ala Gly Gly Pro Ser Asp Ser Ser Ile  
 20 25 30  
 Tyr Gln Tyr Gly Gly Thr Val Ser Tyr Thr Asn Thr Ser Phe Pro Gly  
 35 40 45  
 Phe Gln Asn Pro Thr Ser Ser Glu Tyr Ala Leu Trp Ser Tyr Asn Thr  
 50 55 60  
 Ser Asn Gly Ser Trp Asp Gln Phe Asp Val Thr Leu Gly Ala Glu Tyr  
 65 70 75 80  
 Arg Pro Ala Gly Gly Ala Tyr Gly Glu Ala Pro Asp Gln Glu Leu Ala  
 85 90 95  
 Phe Tyr Leu Asn Gly Tyr Ile Asn Asn Gly Thr Ser Asn Asp Leu Glu  
 100 105 110  
 Asp Ser Asp Asp Leu Leu Arg Tyr Leu Asp Gly Leu Ile Val Ile Asp  
 115 120 125  
 Thr His Thr Gln Met Ala Thr Asn Ile Ser Thr Ser Ser Leu Ala Asn  
 130 135 140  
 Phe Pro Arg Val Arg Gly Gly Met Val Tyr Ile Pro Gly Ile Gly Pro  
 145 150 155 160  
 Lys Gly Ile Leu Val Ala Val Gly Gly Val Thr Lys Ser Ala Ser Asp  
 165 170 175  
 Gly Ser Ala Ser Asn Glu Gly Thr Tyr Val Gly  
 180 185

&lt;210&gt; 44276

20012

<211> 187  
 <212> PRT  
 <213> A.fumigatus

<400> 44276

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Asp | Tyr | Ala | Arg | Met | Leu | Gly | Pro | Pro | Ser | Trp | Met | Lys | Thr | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Ala | Ser | Val | Pro | Met | Pro | His | Gly | Ala | Met | Ser | Leu | Gly | Gln | Ser |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Thr | Glu | Pro | Arg | Thr | Met | Ser | Pro | Lys | Asp | Ala | Val | Leu | Asp | Phe |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Asn | Glu | Thr | Glu | Asp | Ala | Ser | Met | Pro | Pro | Leu | Phe | Pro | Ser | Ser | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Pro | Asp | Phe | Asn | Leu | Ser | Glu | Ala | Leu | Gly | Leu | Arg | Arg | Glu | Ser | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ser | Ser | Leu | Arg | Gln | Ala | Gln | Asn | Phe | Pro | Ser | Met | Asp | Ser | Phe | Ser |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Gln | Phe | Asn | Thr | Gln | Thr | Ser | Ser | Leu | Ser | Gln | Gln | Tyr | Pro | Phe |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Gln | Gln | Gln | Gln | Asn | His | Arg | Gln | Pro | Gln | Leu | Gln | Gln | Gln | Gln |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Asn | Leu | Leu | His | His | Thr | Pro | Glu | Phe | Pro | Ala | Ser | Leu | Pro | His |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Asp | Ser | Thr | Gly | Ser | Glu | Val | Ile | Gln | Asn | Asp | Met | Thr | Ser | Ser |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gln | Ser | Asn | Met | Asn | Ile | Leu | Pro | Leu | Lys | Gly | Glu | Ile | Thr | Arg | Pro |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asp | Asn | Thr | Ser | Thr | Asp | Gly | Gly | Thr | Tyr | Thr |     |     |     |     |     |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     |     |     |

<210> 44277  
 <211> 182  
 <212> PRT  
 <213> A.fumigatus

<400> 44277

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Lys | Gly | Gly | Gly | Val | Ile | Gln | Val | Ser | Ala | Ser | Asp | Ala | Val | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Val | Met | Ile | Ala | Ala | Arg | Glu | Arg | Arg | Val | Arg | Glu | Gln | Ala | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Glu | Gly | Leu | Lys | Asp | Gly | Thr | Val | Glu | Tyr | Glu | Asp | Arg | Val | Met |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Leu | Arg | Pro | Arg | Leu | Val | Ala | Leu | Gly | Ser | Asn | Gln | Ala | His | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Thr | Ala | Lys | Gly | Ala | Leu | Leu | Ala | Gly | Thr | Arg | Tyr | Arg | Ser | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Thr | Ala | Arg | Leu | Glu | Asp | Asn | Met | Glu | Met | Thr | Gly | Pro | Arg | Leu | Arg |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Val | Leu | Glu | Gln | Cys | Asp | Lys | Asp | Gly | Leu | Thr | Pro | Tyr | Tyr | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr | Leu | Gly | Met | Gly | Thr | Thr | Asn | Thr | Cys | Ala | Leu | Asp | Arg | Phe | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Ile | Lys | Ala | Val | Leu | Lys | Glu | Lys | Pro | His | Trp | Gln | Arg | Ile | Trp |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val | His | Ile | Asp | Ala | Ala | Tyr | Ala | Gly | Ala | Ala | Leu | Val | Ala | Asp | Glu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |

## 20013

Trp Gln Tyr Ile Ala Lys Asp Phe Ala Glu Gly Ser Ser Pro Arg Gly  
                   165                  170                  175  
 Trp Lys Val Thr Arg Ser  
                   180

<210> 44278  
 <211> 117  
 <212> PRT  
 <213> A.fumigatus

<400> 44278  
 Gly Gln Ser Tyr Ile Ser Tyr Leu Pro Tyr Ala Asn Lys Glu Ser Pro  
 1                  5                  10                  15  
 Lys Ile Asn Ile Ile His Ala Gln Arg Ser Ile Gln His His Phe His  
                   20                  25                  30  
 Ile Thr Asp Asn Asp Trp Thr Leu Asn Leu Ile Ser Pro Ile Tyr Pro  
                   35                  40                  45  
 Ser Ala Ser Phe Ala Ile Leu Ile Val Pro Tyr Lys Asp Cys Cys Gln  
                   50                  55                  60  
 Leu Cys Arg His Asp Ser Glu Arg Met Trp Ser Arg Leu Leu Leu Ala  
 65                  70                  75                  80  
 Asn Pro Lys Gln Leu Leu Phe Tyr His Cys Cys Gly Lys Ile Tyr Gly  
                   85                  90                  95  
 Thr Leu Asn Ile Leu Arg Val Ala His Thr Lys Leu Tyr Ser Glu Arg  
                   100                  105                  110  
 Ile Asn Thr His Arg  
                   115

<210> 44279  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 44279  
 Thr Met Ile Ile Ala Arg Phe Phe Asn Gly Leu Ser Gly Ser Ala Phe  
 1                  5                  10                  15  
 Leu Ser Val Ala Gly Gly Thr Val Gly Asp Leu Phe His Arg Gln Glu  
                   20                  25                  30  
 Leu Ala Ala Leu Met Met Val Tyr Thr Ala Ser Pro Phe Leu Val Pro  
                   35                  40                  45  
 Glu Ile Gly Leu Val Leu His Ala Arg Arg Trp Lys Pro Leu Gly  
                   50                  55                  60

<210> 44280  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

<400> 44280  
 Thr Arg Phe Leu Pro Ser Arg Leu Glu Asp Ala Ala Val Val Thr Val  
 1                  5                  10                  15  
 Lys Pro Gly Gly Met Arg Glu Ile His Trp His Pro Thr Ser Asp Glu  
                   20                  25                  30  
 Trp Ala Phe Phe Ile Arg Gly Gln Gly Arg Ala Thr Leu Phe Ser Ala  
                   35                  40                  45  
 Pro Ser Thr Ala Thr Thr Phe Asp Tyr Arg Ala Gly Asp Val Gly Tyr

## 20014

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |     |
| Phe | Pro | Lys | Ser | Asn | Ser | His | Tyr | Ile | Glu | Asn | Thr | Gly | Asp | Glu | Asp |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Leu | Phe | Leu | Glu | Val | Leu | Gln | Ala | Asp | Lys | Phe | Thr | Gly | Ala |     |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |

&lt;210&gt; 44281

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2),(20),(29),(30),(43),(46)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44281

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Xaa | Pro | Phe | Pro | Gly | Arg | Arg | Pro | Val | Gln | Gly | Arg | Glu | Ser | Phe |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Leu | Ala | Leu | Xaa | Val | Arg | Met | Ala | Phe | Ser | Gln | Gly | Xaa | Xaa | Arg | Glu |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Pro | Ser | Leu | Phe | Arg | Ser | Ser | His | Met | Asp | Xaa | Val | Gln | Xaa | Glu | Thr |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Leu | Arg | Arg | Leu | Trp | His | Gln | Ile | Cys | His | Leu | Asp | Phe | Arg | Ser | Ala |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Glu | Gly | Arg | Gly | Gln | Glu | Pro | Thr | Ile | Ala | Asp | Glu | Asp | Tyr | Thr | Thr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Leu | Pro | Arg | Asn | Ile | Asn | Asp | Glu | Asp | Leu | Ile | Glu | Gly | Ala | His |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Pro | Thr | Ala | Glu | Thr | Tyr | Ser | Pro | Pro | Gly | Phe | Thr | Asp | Met | Thr | Gly |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| His | Leu | Ile | Arg | Leu | His | Gly | Ile | His | Cys | Phe | Arg | Arg | Ile | Val | Arg |
|     | 115 |     |     |     | 120 |     |     |     |     |     |     | 125 |     |     |     |
| Ser | Thr | Tyr | Arg | Leu | Glu | Arg | Arg | Ile | Lys | Ser | Ser | Val | Ala | Asn | Gly |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| Asn | Gly | Asn | Leu | Tyr | Pro | Ile | Ala | Glu | Leu | Gln | Ser | Leu | Phe | Val | Glu |
| 145 |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     | 160 |     |
| Val | Arg | Thr | Met | Val | Asp | Glu | Met | Val | Asn | His | Leu | Gln | Thr | Gln | Tyr |
|     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |     |
| Leu | Gln | Tyr | Cys | Asp | Pro | Gln | Ile | Pro | His | Gln | Arg | Met | Ala | Leu | Gly |
|     |     | 180 |     |     | 185 |     |     |     |     |     |     | 190 |     |     |     |
| Leu | Ala | Ala | Val | Ile | Glu | Trp | Arg | Cys | Trp | Ser | Ile | Phe | Trp | Leu | Arg |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Thr | Pro | Lys | Gln | Tyr | Arg | Glu | Ala | Val | Val | Ser | Pro | Glu | Ile | Arg | Gln |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |
| Thr | Tyr | Val | Trp | Cys | Cys | His | Trp | Ser | Arg | Glu | Arg | Leu | Phe | Ser | Cys |
| 225 |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Leu | Gly | Ala | Lys | Ala | Asn | Glu | Cys | Val |     |     |     |     |     |     |     |
|     |     |     | 245 |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 44282

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

## 20015

&lt;221&gt; UNSURE

&lt;222&gt; (39), (48)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44282

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ile | Leu | Ile | Met | Glu | Asn | Ile | Glu | Ser | Pro | His | Ser | Asp | Thr | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Ile | Asn | Ile | Arg | Thr | Tyr | Leu | Val | Ile | Leu | Ile | Lys | Lys | Thr | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Ser | His | Ile | Phe | Ile | Xaa | Phe | Ala | His | Leu | Thr | Leu | Ala | Asn | Xaa |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Pro | His | Ile | Trp | Gly | Asp | Phe | Ile | Leu | Lys | Gly | Arg | Thr | Asp | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Ser | Leu | Ser | Ala | Ser | Asp | Met | Leu | Cys | Val | Leu | Glu |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     |

&lt;210&gt; 44283

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44283

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Phe | Phe | Leu | Gln | Cys | His | Met | Arg | Pro | Pro | Ile | His | Ala | Phe | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Leu | Leu | Leu | Arg | Ser | Glu | Val | Gln | Ala | Ser | Phe | Pro | Ile | Glu | Cys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Glu | Met | Thr | Thr | His | Thr | Leu | Pro | Lys | Gln | Arg | Met | Arg | Leu | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Asp | Arg | Ala | Arg | Thr | Ala | Gln | Cys | Met | Trp | Phe | Gly | Ile | Ile | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ala | Leu | Phe | Thr | Pro | His | Ile | Leu | Cys | Tyr | Ser | Trp | Ala | Thr | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ala | Glu | Pro | Leu | Ala | Ser | Leu | Gly | Ser | Asp | Ser | Thr | Met | Ala | Phe | Asp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Lys | Pro |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 44284

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44284

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ala | Gln | Ser | Lys | Glu | Leu | Asn | Tyr | Ala | Asp | Ser | Ile | His | Asp | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Tyr | Gly | Asn | Val | Ala | Ala | Ser | Ser | Val | Asp | Ser | Arg | Gly | Asp | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Trp | Leu | Asn | Leu | Thr | Gly | Phe | Ala | Val | Asn | Glu | Leu | Pro | Tyr | Ile | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Ala | Val | Gly | Ile | Thr | Ser | Leu | Asp | Asn | Ala | Arg | Glu | Leu | Gln | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Ala | Gly | Leu | Val | Ser | Thr | Ala | Ala | Ser | Gln | Gln | Gln | Trp | Gly | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Val | Val | Phe | Leu | Tyr | Asn | Val | Phe | Ser | Met | Asn | Ala | His | Pro | Glu | Phe |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ala | Arg | Val | Val | Ser | Pro | Gln | Met | Gln | Ala | Gly | Leu | Leu | Asp | Ala | Val |

## 20016

```

          100              105              110
Arg Asp Arg Ala Ser Asn Ala Gly Pro Asp Asp Arg Leu Ile Glu Leu
          115              120              125
Tyr Ala Ser Thr Ser Ser Ser Pro Ser Leu Val Glu Ala Phe Arg Ala
          130              135              140
Leu Pro Asp Leu His Pro Gly Ala Gly Arg Asn Arg Asn
          145              150              155

```

&lt;210&gt; 44285

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (51)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44285

```

Arg Ala Gln His Pro Ser Ala Cys Arg Ser Ala Ser Leu Ala Ser Arg
1              5              10              15
Ala His Cys Gly Gln Ala His Ala Cys Ser Thr Gly Lys Ala Pro Ala
          20              25              30
Ser Arg Ser Arg Ala His Ser Ala Arg Leu Arg Pro Pro Gln Pro Pro
          35              40              45
Pro Leu Xaa Arg Ile Leu Ser Val His Asp Ser Gln His Thr Leu Ser
          50              55              60
Ser Val Phe Ser Ala Ala Leu Ser Thr Gln Gln Ser His Ser Pro Gln
65              70              75              80
Pro His Ser Tyr Pro His Phe Pro Thr Thr Pro Ala His Ala His Arg
          85              90              95
Asn His Thr His Pro Asp Asn Thr His Thr Glu Pro Ser Ser Ser Gln
          100              105              110
Ala Thr Arg Lys Cys Ser Arg Ser Tyr Arg Arg Ile Pro Pro Ala Ile
          115              120              125
Ser Pro Gln Thr Pro Pro Pro His Pro His Pro Pro Asp Pro Arg Ala
          130              135              140
Asp Tyr Pro Pro Ala Ala
          145              150

```

&lt;210&gt; 44286

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44286

```

Gly Arg Thr Gly Ser Lys Gly Gly Arg Val Ser Glu Asn Leu Pro Trp
1              5              10              15
Leu Asp Trp Met Ala Lys Leu Arg Arg Arg Asp Arg Asn Ser Ser Ala
          20              25              30
Arg Thr His Arg Asn Cys Asn Leu Gln Asn Met Gln Gly Pro Val Thr
          35              40              45
Glu Glu Ile Met Phe Arg Ser Ala Ile Val Leu Leu His Leu Leu Ala
          50              55              60
Lys Asp Thr Pro Gly His Ile Val Phe Val Ala Pro Leu Tyr Phe Gly
65              70              75              80

```



## 20017

```

Ile Ala His Val His His Phe Tyr Glu Phe Arg Leu Thr His Pro Asp
      85                      90                      95
Thr Ser Ile Phe Ala Ala Leu Phe Arg Ser Val Phe Gln Phe Gly Tyr
      100                    105                    110
Thr Thr Ile Phe Gly Trp Tyr Ala Thr Phe Leu Tyr Leu Arg Thr Gly
      115                    120                    125
Ser Leu Leu Ala Val Ile Val Ala His Ser Phe Cys Asn Trp Cys Gly
      130                    135                    140
Leu Pro Arg Leu Trp Gly Arg Val Glu Ala Ser Val Pro Ile Gly Pro
145                    150                    155                    160
Pro Val Gly Lys Ala Lys Glu Asp Ala Asp Val Lys Asp Ala His Ala
      165                    170                    175
Ala Tyr Gly Lys Leu Gly Leu Gly Trp Thr Val Gly Tyr Tyr Val Leu
      180                    185                    190
Leu Val Ser Gly Ala Ile Ala Phe Tyr Tyr Ala Leu Trp Pro Leu Ser
      195                    200                    205
Asp Ser Pro Asn Ala Leu Asp Thr Phe Thr Gly Gly Ser Lys
      210                    215                    220

```

&lt;210&gt; 44287

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3), (4), (5), (7), (8), (9), (12), (17), (263)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44287

```

Ile Glu Xaa Xaa Xaa Gly Xaa Xaa Xaa Tyr Glu Xaa Leu Leu Ala Thr
1      5      10      15
Xaa Gln Asp Pro Ser Pro Ser Lys Ser Gly Ser Pro Arg Thr Arg Asn
      20      25      30
Lys Pro Ser Gln Ser Gly Ser Arg Ser Ser Gly Ser Val Ala Asp Thr
      35      40      45
Arg Gly Thr Gln Pro Gly Ser Met Asp Met Leu Glu Phe Leu Thr Ser
      50      55      60
Pro Glu Pro Ala Arg His Asp Ala Glu Ala Asn Thr Ala Thr Leu Thr
65      70      75      80
Ser Thr Ser Ser Pro His Ser Ile Thr Phe Phe Asp Phe Val Asn Met
      85      90      95
Asn Asn Pro Pro Ser Met Leu Lys Leu Thr Asn Lys Glu Ser Ile Ala
      100     105     110
Pro Asn Ala Leu Thr Thr Ile Leu Phe Phe Met Trp Gly Val Ala Tyr
      115     120     125
Gly Leu Leu Asp Ile Leu Asn Thr Gln Phe Gln Gln Ile Val Arg Leu
      130     135     140
Asp Ser Trp Arg Ser Leu Gly Leu His Ala Val Tyr Phe Gly Gly Tyr
145     150     155     160
Leu Val Gly Pro Pro Leu Val Gly Arg Thr Val Leu Lys Arg Trp Gly
      165     170     175
Phe Lys Ser Thr Phe Ile Thr Gly Leu Cys Ile Tyr Ala Cys Gly Thr
      180     185     190
Leu Val Phe Trp Pro Ser Ala Val Leu Thr Ser Tyr Ser Ala Phe Thr
      195     200     205

```

## 20018

Ile Ser Asn Phe Ile Val Gly Phe Gly Leu Ala Val Leu Glu Thr Ala  
 210 215 220  
 Ala Asn Pro Phe Ile Ala Leu Cys Gly Pro Leu Glu Asn Ser Glu Ile  
 225 230 235 240  
 Arg Leu Asn Ile Ser Gln Gly Val Gln Ala Ile Gly Ser Val Val Ser  
 245 250 255  
 Pro Leu Leu Ala Lys Lys Xaa Trp  
 260

<210> 44288  
 <211> 107  
 <212> PRT  
 <213> A.fumigatus

<400> 44288  
 Thr Asn Gly Thr Asn Ser Lys Trp Ala Thr Ala Val Asp Gly Leu Leu  
 1 5 10 15  
 Asn Asn Thr Leu Asp Ile Phe Phe Pro Ala Lys Tyr Gly Gly Asn Ile  
 20 25 30  
 Met Ser Glu Val Leu Cys Glu Pro Asn Glu Val Cys Asn Asp Asn Glu  
 35 40 45  
 Ile Leu Phe Lys Gly Leu Val Thr Ser Trp Leu Ala Phe Thr Ala Leu  
 50 55 60  
 Leu Val Pro Ser Thr Tyr Asp Arg Ile Leu Pro Lys Leu Gln Gly Ser  
 65 70 75 80  
 Ala Val Ala Ala Gly Ala Thr Cys Thr Gly Asn Gly Asn Asn Ser Cys  
 85 90 95  
 Gly Val Arg Trp Tyr Thr Ser Lys Trp Asp Gly  
 100 105

<210> 44289  
 <211> 65  
 <212> PRT  
 <213> A.fumigatus

<400> 44289  
 Pro Leu Thr Tyr Thr Lys Ile Lys Ile Asn Asn Lys Thr Asn Asn Ser  
 1 5 10 15  
 Pro Pro Ile Phe Thr Lys His Asn His His Gln Thr Lys Asn Pro Asn  
 20 25 30  
 Tyr Ile Gln Gln Pro Asn Ile Ile His Pro Pro Thr Tyr Lys Tyr Ser  
 35 40 45  
 Ile Ile Thr Thr Thr Asn Lys Pro Ile Asn Phe Pro Phe Ser Ile Gln  
 50 55 60  
 Leu  
 65

<210> 44290  
 <211> 60  
 <212> PRT  
 <213> A.fumigatus

<400> 44290  
 Gln Glu Lys Ser Tyr Pro Leu Asn Pro Ser Ile Ile Thr Pro Leu Lys  
 1 5 10 15  
 Thr Asn Ser Ser Lys Ile Lys Ser Ile Thr Pro Leu Lys Pro Gln Leu

20019

Ile Gln Gln 20 Leu Ile Thr Ile Thr 25 Pro Gly Ala Asp 30 Gly Gln Phe Lys  
35 40 45  
Pro Phe Arg Gly Arg Ile Val Cys Phe Trp Gly Pro  
50 55 60

```
<210> 44291
<211> 175
<212> PRT
<213> A.fumigatus
```

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 44291 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| Thr         | Leu | Leu | Gln | Ala | Ile | Leu | Gly | His | Met | Cys | Pro | Ile | Arg | Leu | Arg |  |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Asn         | Cys | Arg | Leu | Ala | Arg | Ser | Ser | Gln | Ser | Leu | Phe | Ser | Lys | Glu | Ala |  |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Cys         | Pro | Trp | Leu | Arg | Ser | Thr | Asp | His | Val | Leu | Ala | Ile | Phe | Glu | Lys |  |
|             |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Pro         | Val | Gln | Thr | Lys | Glu | Ile | Leu | Gly | Pro | Asn | Asp | Ser | Leu | Arg | Asp |  |
|             | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Asp         | His | Arg | Arg | Asn | Phe | Phe | Pro | Pro | Lys | Lys | Leu | His | Ile | Leu | Leu |  |
| 65          |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Glu         | Ser | Pro | His | Arg | His | Trp | Phe | Arg | Leu | Ser | Ala | Cys | Arg | Pro | Leu |  |
|             |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Gly         | Trp | Val | Ser | His | Leu | Phe | Pro | Pro | Ser | Leu | Leu | Phe | Arg | Ser | Ser |  |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Ser         | Glu | Pro | Leu | Glu | Leu | Pro | Pro | Arg | Val | Phe | Pro | Ala | Pro | Ser | Ser |  |
|             |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Phe         | Trp | Leu | Gln | Phe | Ser | Pro | Ser | Leu | Pro | Pro | Asn | Ser | Pro | Pro | Leu |  |
|             | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Glu         | Ser | Pro | Leu | Pro | Pro | Pro | His | Lys | Thr | Pro | Pro | Phe | Ile | Pro | Pro |  |
| 145         |     |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     | 160 |  |
| Ser         | Val | Val | Met | Lys | Gly | Phe | Pro | Phe | His | Pro | Thr | Gly | Pro | Ser |     |  |
|             |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |

```
<210> 44292
<211> 134
<212> PRT
<213> A.fumigatus
```

|             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 44292 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Glu         | Gly | Pro | Val | Gly | Trp | Lys | Gly | Asn | Pro | Phe | Ile | Thr | Thr | Glu | Gly |
| 1           |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly         | Ile | Lys | Gly | Gly | Val | Leu | Cys | Gly | Gly | Gly | Lys | Gly | Asp | Ser | Ser |
|             |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly         | Gly | Glu | Phe | Gly | Gly | Arg | Leu | Gly | Glu | Asn | Cys | Asn | Gln | Lys | Asp |
|             |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Glu         | Gly | Ala | Gly | Lys | Thr | Arg | Gly | Gly | Asn | Ser | Ser | Gly | Ser | Glu | Glu |
|             | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Glu         | Arg | Asn | Arg | Arg | Glu | Gly | Gly | Lys | Arg | Trp | Glu | Thr | His | Pro | Arg |
| 65          |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly         | Arg | His | Ala | Asp | Ser | Arg | Asn | Gln | Trp | Arg | Cys | Gly | Asp | Ser | Arg |
|             |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Arg         | Ile | Cys | Ser | Phe | Leu | Gly | Gly | Lys | Lys | Phe | Leu | Leu | Trp | Ser | Ser |
|             |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg         | Arg | Glu | Ser | Phe | Gly | Pro | Lys | Ile | Ser | Leu | Val | Cys | Thr | Gly | Phe |